JADE CARE
Joint action on implementation of digitally enabled integrated person-centred care

D7.1 THE OPTIMEDIS MODEL ORIGINAL GOOD PRACTICE AND TRANSFER PROCESS

Annex document

OptiMedis AG

Date: 31/03/2023
Doc. Version: 1.0

PUBLIC DOCUMENT

www.jadecare.eu

This document was funded by the European Union's Health Programme (2014-2020) under Grant Agreement 951442

Title	Joint action on implementation of digitally enabled integrated person-centred care
Acronym	JADECARE
GA Number	951442
Type of instrument	Deliverable
Topic	Description of Good Practice and transfer process
Date	31/03/2023
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Version history

Revision	Date	Editor	Comments
0.1	20/03/23	Manfred Zahorka	First Draft
0.9	29/03/23	Yhasmine Hamu, Ane Fullaondo, Kronikgune Institute for Health Services Research	Quality review
1.0	31/03/23	Manfred Zahorka, Oliver Gröne, Justin Rautenberg, OptiMedis AG	Final version 1.0

Disclaimer

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Table of abbreviations

ACO	Accountable care organisations
ACSA	Ambulatory care sensitive (hospital) admissions
App	Application
ARS	Agence Regional De Santé (Regional Health Agency)
BARC	German Business Application Research Centre
BI	Business Intelligence
CEO	Chief Execution Officer
CF	Core Feature
CHU	Centre hospitalier universitaire (University Hospital)
CKD	Chronic kidney disease
CLS	Contrat local de santé (Local health contract)
COPD	Chronic obstructive pulmonary disease
COVID	Coronavirus disease
CPAM	Caisse Primaire d'Assurance Maladie (Health insurance)
CPTS	Communautés Professionnelles Territoriales de Santé (Territorial Professional Health Communities
CQI	Continuous Quality Improvement
CVD	Cardiovascular diseases
DM	Diabetes mellitus
DSL	Dienststelle für selbstbestimmtes Leben (entre for self-determined living)
DTCP	Diagnostic and Therapeutic Care Pathways
EBM	Evidence based medicine
EC	European Commission
ECDC	European Centre for Disease Prevention and Control
EHR	Electronic Health Record
EPJ	Electronic Patient Journal
EU	European Union
EUSTRAS	Eurométropole de Strasbourg
FCN	Family and Community Nurse
FFS	Fee for Service
FORTA	Fit for the Aged
GDPR	General Data Protection Regulation
GHT	Groupement des hopitaux de territoire (Group of territorial hospitals)
GIP MSS	Groupement d'Interêt Publique – Maison Sport Santé
GK	Gesundes Kinzigtal (Healthy Kinzigtal)
GP	General practitioner
GWMK	Gesunder Werra Meissner Kreis (Healthy Werra Meissner District)
HCP	Healthcare professional
(C)HF	(Congestive) Heart Failure
HIS	Healthcare Information Systems
ICD	International Classifications of Diseases
ICIC	International Conference on Integrated Care
I(C)T	Information (and Communication) Technology
ICP	Individualized Care Plan
IHD	Ischemic heart disease

IHO	Integrated Healthcare Organization
IPCHS	Integrated people centred health services
JA	Joint Action
LAP	Local Action Plan
LCF	Local Core Feature
LGP	Local Good Practice
MoH	Ministry of Health
MoHRS	Ministry of Health of the Republic of Serbia
MUS	Maison urban de Santé (Urban House of Health)
NA	Next Adopter
NAWG	Next Adopter Working Group
NCD	Non-communicable Diseases
NHIF	National Health Insurance Fund
oGP	Original Good Practice
PC	Primary Care
PDSA	Plan Do Study Act
PHM	Population health management
PM	Project Manager
PRISCUS	Potentially inappropriate medications for the elderly
QA	Questionnaire
RND	Region of North Denmark
RUB	Resource Use Band
SDCN	Steno Diabetes Centre North Denmark
SMART	Specific Measurable Achievable Relevant Time-bound
SSsO	Sport santé sur prescription (Sports on prescription)
TSD	Territoire de santé de demain (Health territory of the future)
UNODP	United Nations Office on Drugs and Crime
VR	Virtual reality
WHO	World Health Organization
ZZZS	Slovenia Health Insurance Institute

Annex 1: Implementation reporting documentation

This appendix document includes the reporting documentation of the eight NAs of the Basque Good Practice for the three phases of the implementation process:

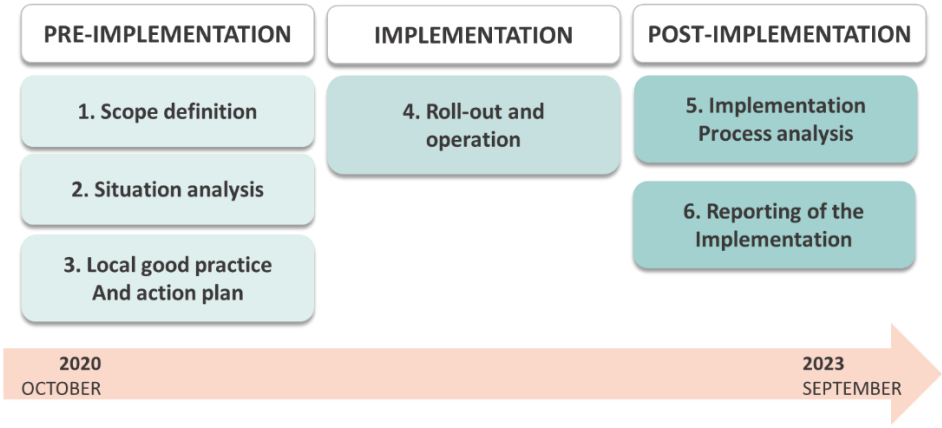


Figure 1: JADECARE three step Implementation Strategy

Pre-implementation

The objective of this phase is to elaborate the LGPs and the LAPs to be followed during the implementation by means of three activities:

- Scope definition: that implies selecting the CFs of the oGP(s) to be implemented and integrated in routine practice in each NA site. For this means, the NAs assessed the relevance and feasibility of the CFs of the oGP(s) in a four points scale, where 0=Not at all and 4= Extremely, and selected those to be implemented at the local site.
- Situation analysis: whose purpose is to analyse the organizational position of the NAs within the environment by conducting a SWOT analysis to then define its Strategic Intervention Areas (SIAs).
- Definition of the LGPs and LAPs: including the detail of the intervention designed: name of the good practice, target population, setting, main aim, general description, needed inputs, main components and expected outcomes and the concrete actions to be taken to deploy it, including each SMART objective, specific activities, actors, resources, settings(s), timeline and KPIs.

Implementation

It consisted of the execution and monitoring of the implementation by means of 2 Plan-Do-Study-Act (PDSA) Cycles, where the report of each step includes:

- Plan: a detail of the activities broken down into actions, actors, timeline and information on KPIs to assess them (target value and who/when and how will the data be collected).
- Do: information on the actual value of the KPIs compared to the planned target value, a summary of what was actually implemented and description of deviations, problems or unexpected findings, if any, as well as the implementation progress achieved until the moment.
- Study: the reasons for the deviations, mitigation actions implemented and their impact, considering the planned and actual KPI values.
- Act: the decision to maintain, adapt or abandon each activity as well any new proposed action for the future.

Post-implementation

The whole implementation was reported by each NA by means of the SQUIRE 2.0 adapted guidelines. It contains SQUIRE 2.0 contains 18 items to respond 2 general sections and 4 key questions: title and abstract, why did you start?, what did you do? , what did you find?, what does it mean? and other information

North Denmark Region (RND)

Pre-implementation

Scope definition

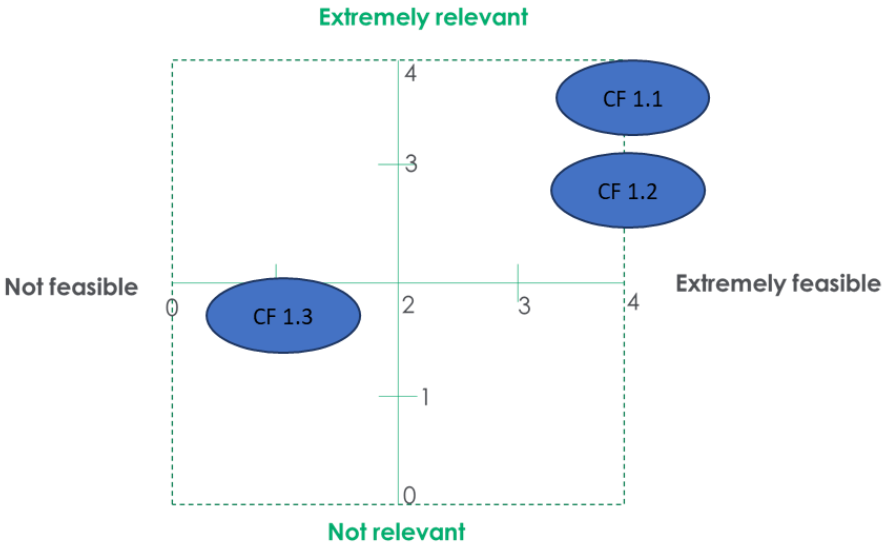
Identified and prioritized needs

Block		Prioritised nNeeds (grouped)
Block 1 Shared savings contract with reimbursement/ commissioning organizations	1	Setting up local integrator or alternative
	2	Secure investment and develop “business plan”
	3	Create evidence for improved population health and patient well-being through integrated, performant and cost-effective care (preventive and disease management) interventions
Block 2 A model including strong stakeholder engagement	4	Identify key stakeholders and define local health eco-system
	5	Situation analysis and definition of improvement opportunities
	6	Identify and implement incentive system for stakeholder engagement
Block 3 Electronic integration across providers	7	Define data integration needs (shared patient files, exchange platforms for chronic disease model, IT requirements), implement national data integration standards
	8	Implement data sharing tools (depending on national and reginal IT strategies in health and their implementation plan)
Block 4 Patient involvement and empowerment	9	Put in place a patient participation mechanism
	10	Develop patient activation strategy and design interventions
Block 5 Data-driven management	11	Define outcome indicators and KPIs
	12	Identify analytical needs and implement appropriate strategies
	13	Continuously monitor outcomes and impact of interventions
Block 6 Prevention, health promotion and public health	14	Identify primary prevention and behaviour change priorities with a focus on chronic disease
	15	Develop and launch communication activities
	16	Identification of disease management priorities and implement integrated patient centred care plans

Block	Prioritized needs
Stratification	Stratification for choice of treatment
	Stratification to prioritize development initiatives
Dashboard	Dashboard on individual patient level
	Dashboard on population
Prediction	Support on data collection and data quality
	Prediction on late complication and quality of life
	Search for State of the art in diabetes treatment

Assessment of Core Features

Core feature	Relevance	Feasibility
CF 1.1 Stratification data extraction and construction of dashboards	4	4
CF 1.2 Classification of patients	3	4
CF 1.3 Stratification in the framework contract	2	1



Final Core Features selected

CF1.1 Risk stratification
CF1.2 Classification of patients
CF1.3 Stratification in the Framework Contract

Situation analysis

	Strengths	Weaknesses
Internal	• RND have a large Data pool • We have a mutual ambition to use data • The staff has a generally high level of competence in relation to data and IT • (almost) Realtime Data on patients • Great focus on data collection • We have the best data completeness in Denmark • We have the resources to work with data (3 employees in BI dedicated to diabetes data) • We have a high degree of valid data • Data from many difference data sources within the healthcare system • High level of motivation • Strong focus on our strategy - it is a stated ambition	• DO!!! (it is sometimes difficult to get things done even though data supports new initiatives) • We do not have access to socio-economic data (Family status, level of education, housing, social services, municipal health services) • You can´t make dynamic adjustments in a clinic that is booked far into the future (over a year) • The healthcare economy is politically controlled and sometimes there is a risk that political decisions are poorly related to data in the field. • Data across sectors is very difficult • Lack of quality in registration • Validity - clinicians often do not get everything registered. For example, documentation of delivery of diabetes equipment. • Lack of financial incentives • The ability to manage change through data is weak
	Opportunities	**Threats**
External	• Data-driven competence development - adaptive services for patients • Cross-sectoral - exchange data and knowledge with other health actors • Patient empowerment	• Inappropriate breaches of data definitions and data flows associated with new EHR and other new systems • It is difficult to change the habits within the health field

• Opportunity to see potentials that we cannot see today without data • Increased quality through insight into effect • Data as a basis for idea generation and innovation • Strengthen the power of transformation • Prioritization of the target group • Individually adapted treatment • Competence boost in relation to data use • Decision and treatment support • AI • Targeted efforts for smaller geographical areas • The actual use of data in itself creates better registration quality	• Conflict in the field. Data have been used for natural scientific evidence and scientific publications. A new tradition must be built. • Commercial issues with external partners. • Who owns data: Diabetic pump manufacturer, healthcare provider or patients? • GDPR • Change in key staff • Change in politics agendas • Daily operations consume time from development tasks • We are having a new primary source for data processing in 2022 (NordEPJ) • Change in data definitions (New subcategories of treatment types) • Noisy data • IT maturity • Data overload • Resistance to change • Distrust of data (due to previous misinterpretations)

Strategic Intervention Areas

Strategic intervention area	Priority	Ranking
Further development of SDCN Data dashboards	3	1
Develop Competencies to use data strategically	3	2
Implementation in practice (DO part)	3	3
Framework conditions (Law, risks, systems)	1	
Cross-sectoral data	2	
Change management with data	2	

Definition of the LGP and LAP

Local Good Practice

Local Good Practice	Region of North Denmark (RND)
Target population	**Setting(s)**
The North Jutland region has 590,439 inhabitants in 2021. The project will have a special focus on active diabetes patients in the hospital (5,627 active based on the current patient status)	The regional health system - possibly in collaboration with selected municipalities

Main aim

The North Jutland region has already come a long way with their strategic use of data. The reason for joining JADECARE is to be inspired to further develop our own solutions with the Mix and Match approach. The purpose has therefore not been to implement a complete or parts of IT systems of the oGP,s but primarily to learn from positive experiences from other EU countries. Our NAWG has expressed interest in these parts:
German Good Practice (OptiMedis): CF 5.1: Potential analysis tool and Core Feature 5.2: Performance dashboards
Basque Good Practice: CF 1.1: Stratification Data extraction and construction of Dashboards and Core Feature 1.2: Classification of patients. 1.3: Stratification in the Framework Contract
It is these areas where we would like to be **inspired** about ways to build our dashboards and develop new project ideas. Therefore, our local action plan and local core features is more of an exchange of ideas for areas where we expect to be able to learn from oGPs.
We would like to be inspired in two levels:
First Main aim: Focus on the diabetic patients (5.627 active patients)
Here we would like to realize Steno Diabetes Centre North Jutland's vision
• Increase quality of life and life expectancy for citizens with diabetes.
• Create a coherent diabetes treatment close to the citizen.
• Slow down the growth of new cases of diabetes.
This must happen based on strategic use of data and data dashboard in the field of diabetes. Although this part is focused on the diabetes area, there are many external actors (Other hospitals, municipalities, rehabilitation units, etc.) who can strengthen cooperation with SDCN through joint use of dashboards.
Second main aim: Focus on the entire population in North Jutland (590,439 inhabitants)
The second focus is a main aim for the whole region. Among North Jutland health actors (11 municipalities and one region), there is a strong focus on citizens with chronic diseases and / or complex issues. To ensure a new and more data-driven approach to the health field, new knowledge and methods are needed to focus on the entire population group and not only on active patient groups in the hospital.

Outcomes	**Local Core Features and their Components**	**Inputs**
Short term outcome for the project will be: 1: New data dashboards and strategical data usage 2: New competencies at RND and SDCN 3: New projects on the basis of data The long-term effect of this project will be better and more targeted patient care, but this cannot be	1: Further development of SDCN Data dashboards 2: Data-driven approach for the North Jutland population: feasibility study 3: New projects based on data (AI is based on Experience from German Good Practice B5 and Basque Good Practice B1)	• Funding (Novo Nordisk foundation) • BI staff (Recruitment) • Program managers • Decision markers • IT system (Need for ACG Grouper?)

documented within the JADECARE project period.		

General description
A significant investment for Steno Diabetes Centre Nordjylland (part of RND) is a new database of all North Jutland diabetes patients to make a more targeted patient treatment. The database must be the central basis for an ambitious digitization and research effort in SDCN and serve as a valuable basis for both patients, healthcare professionals and researchers in the development of new and improved healthcare services for diabetic patients. There are a large number of data sources that support the field of diabetes today and with increased digitization and the use of home technology and wearables, even more possibilities arise. The aim of the project is to establish a coherent and generic data platform where the diverse data types are brought together and this development work is already well initiated. The database must be able to be used for clinical use, at citizen level, for quality development and clinical research as well as for the development of models for value-based management. SDCN would like to incorporate methods such as patient stratification and risk assessment into the database, so that in the long-term new treatment methods can be created for the individual patient groups. Therefore, RND would like to investigate the ideas, data sources and methods in solutions such as Johns Hopkins ACG System in the Basque Good Practice and the systems of th Germang Good Practice considering which data (Finance data, PRO-data, Quality of Life) the method is based on and if the data can be found in a Danish context.
Local Core Feature 1
Further development of SDCN Data dashboards
Local Core Feature 2
Data-driven approach for the North Jutland population: feasibility study
Local Core Feature 3
New projects based on data

Local Action Plan

Local Good Practice	Region of North Denmark (RND)
Target population	**Setting**
The North Jutland region has 590,439 inhabitants in 2021. The project will have a special focus on active diabetes patients in the hospital (5,627 active based on the current patient status)	The regional health system - possibly in collaboration with selected municipalities
Main aim	
The local good practice has a double aim: **1: Focus on the diabetic patients** Here we would like to realize Steno Diabetes Centre North Jutland's vision: • Increase quality of life and life expectancy for citizens with diabetes. • Create a coherent diabetes treatment close to the citizen. • Slow down the growth of new cases of diabetes. This must happen on the basis of strategic use of data and data dashboard in the field of diabetes. **2: Focus on the entire population in North Jutland** The second focus is a main aim for the whole region. Among North Jutland health actors (11 municipalities and one region), there is a strong focus on citizens with chronic diseases and / or complex issues. To ensure a new and more data-driven approach to the health field, new knowledge and methods are needed to focus on the entire population group and not only on active patient groups in the hospital.	

Therefore, RND would like to investigate the ideas, data sources and methods in solutions such as Johns Hopkins ACG System in the Basque Good Practice and the systems of the German Good Practice considering which data (Finance data, PRO-data, Quality of Life) the method is based on and if the data can be found in a Danish context.

General description

A significant investment for Steno Diabetes Centre Nordjylland (part of RND) is a new database of all North Jutland diabetes patients.
The database must be the central basis for an ambitious digitization and research effort in SDCN and serve as a valuable basis for both patients, healthcare professionals and researchers in the development of new and improved healthcare services for diabetic patients.
There are a large number of data sources that support the field of diabetes today and with increased digitization and the use of home technology and wearables, even more possibilities arise. The aim of the project is to establish a coherent and generic data platform where the diverse data types are brought together. The database must be able to be used for clinical use, at citizen level, for quality development and clinical research as well as for the development of models for value-based management.
SDCN would like to incorporate methods such as patient stratification and risk assessment into the database, so that in the long-term new treatment methods can be created for the individual patient groups.

Related oGPs and CFs	Mix and Match German Good Practice (Optimedis): CF5.1: Potential analysis tool and CF5.2: Performance dashboards Basque Good Practice: CF1.1: Stratification Data extraction and construction of Dashboards and CF1.2: Classification of patients CF1.3: Stratification in the Framework Contract
Local Core Feature 1	**Further development of SDCN Data dashboards**

SMART objective

At the end of JADECARE (September 2023) the Region of Northdenmark will have designed a new dashboard approach for the diabetes patients in Northdenmark - which after the project period will provide better patient care through more targeted offers.

Activities	Actors	Resources	Setting(s)	Timeline	KPIs
Step 1: Examination Examination of programmes used by German and Basque Good Practices	NAWG and German and Basque Good Practices (Data managers etc,)	• Communications-platform • Licenses or demo	Web-based meeting	2021/ 2022	• 1 overview over relevant programmes, software, tools and license (both German and Basque Good Practices) • 1 overview of data sources (both German and Basque Good Practices) • 1 overview of project with diabetes (both German and
Examine data sources in German and Basque Good Practices	NAWG and German and Basque Good Practices (Data managers etc,)	Communications-platform	Web-based meeting	2021/ 2022	
Examine selected activities and project that are initiated by German and Basque Good Practices on the basis of data. This	NAWG and German and Basque Good Practices (Project managers)	Communications-platform	Web-based meeting	2021/ 2022	

could be both diabetes project and general health projects.					Basque Good Practices) • 1 Danish overview of Danish health data sources (Both existing and potential) • 1 new Dashboard for use at Steno Diabetes Centre North Denmark
Step 2: Analysis Identify the location and conditions for Danish data sources (Fit gap)	NAWG		NA's site	2022	
Step 3: Development Development of a new dashboard in the diabetes field in Northdenmark	NAWG and German and Basque Good Practices	Next adopters' database – Development cost	NA's site	End of 2022	
Local Core Feature 2	**Data-driven approach for the North Jutland population: feasibility study**				
SMART objective					
At the end of JADECARE (September 2023) the Region of Northdenmark will have new competencies to use data strategically for better patient care. These competencies are both at employee level and at management level and can be documented that they have been in knowledge sharing process the German and the Basque Good Practices.					
Activities	**Actors**	**Resources**	**Setting(s)**	**Timeline**	**KPIs**
Site visit for the end-users of data Knowledge development for chief physician and chief nurse about the use of data and patient stratification	• chief physician and chief nurse (RND) • German and Basque Good Practices (chief physician and chief nurse)	Study visit (Time and Travel expences)	OGP site	2022	• 4 managers have completed exchange visit • 2 Business intelligence consultants have completed exchange visit • 2 Researchers have completed exchange visit
Site visit for the end-users of data Knowledge development for Business intelligence consultants about development of dashboards and datasources	• Business intelligence consultants (RND) • German and Basque Good Practices (Business intelligence consultants or datamanagers)	Study visit (Time and Travel expences)	OGP site	2022	
Site visit for the end-users of data	• researchers (RND)	Study visit (Time and	Ogp Site	2022	

Knowledge development for researchers about datasources	• German and Basque Good Practices (researchers)	Travel expences)			
Local Core Feature 3	**New projects based on data**				
SMART objective					
At the end of JADECARE (September 2023) the Region of North Denmark will have a list of new project ideas based on data that can be submitted to the Steno board and patients boards.					
Activities	**Actors**	**Resources**	**Setting(s)**	**Timeline**	**KPIs**
Prepare specific project proposals based on data from RND. An example of an projectidea could be "Type 1 diabetespatient absences"	• NAWG • "The idea clinic"	Communication with OGP (Emails, teams etc)	NA site	End of 2022	2 Project proposal
Prototype for data model for stratification – both for diabetic patients and the entire population	• NAWG • "The idea clinic"	• Communication with OGP (Emails, teams etc)	NA site	End of 2022	1 prototype for a new datamodel
Presentation of the results of JADECARE to the internal and external strategic decision-makers in North Jutland	• "The idea clinic" • "the health innovation platform" in RND (Policy level representative)	Communication with OGP (Emails, teams etc)	NA site	End of 2022	1 project summary to policy makers

Implementation

1st PDSA Cycle

Plan

LCF1	**Further development of SDCN Data dashboards (Type 1 diabetes)**							
Activities	**Actions**	**Actors**	**Timeline**	**KPIs measure (data collection)**				
				KPI	**Who**	**When**	**How**	**Target**
1: Examination	• Examination of programs used by German Good Practice • Online Consultations of German Good Practice experts on the existing database in RND • Revisit the Basque Good Practice online site visit and powerpoint	• Project manager: Ulrik Appel • Quality manager: Amar Nikontovic • Head of Digitalization: Tina Heide • Dr. Med. Manfred Zahorka • Head of health data analytics Pascal Wendel • Senior manager Justin Rautenberg	• Completed with OptiMedis 29/11-2021 • Completed with Basque Good Practice on 17/1-2022 with Amar Nikontovic	1 Meeting about relevant programs, software, tools and license	Project manager Ulrik Appel	31 January 2022	From calendar	1
	Examine data sources in German and Basque Good Practices Optimedis shares their file for datarequest with RND. The Basque Good Practice leaders send ASG contract and similar list of datasources	• Dr. Med. Manfred Zahorka from Optimedis • Jon Txarramendieta Suarez from *Kronikgune*	1/1 -2022 to 28/2-2022	1 overview of data sources (both German and Basque Good Practices)	Project manager Ulrik Appel	31 January 2022	Received file/mails	1

	Examine selected activities and diabetes project that are initiated by OptiMedis and Kronikgune on the basis of data. Both sends information about projects based diabetes data	Dr. Med. Manfred Zahorka dialog on Next Adaptors status meeting	1/1 -2022 to 28/2-2022	1 brief overview of project with diabetes (both Kronikgune and OptiMedis)	Project manager Ulrik Appel	31 January 2022	Received information	1
2: Analysis	Identify the location and conditions for Danish data sources (Fit gap) The fit gap analysis will be determining how well RND current data access will fits model from OptiMedis and KronikGune. In other words, it helps RND identify the areas where problems are occurring and how severe they are	• Project manager: Ulrik Appel • Quality manager: Amar Nikontovic • Data manager: vacant	1/3 2022 to 31/3 2022	1 Danish overview of Danish health data sources (Both existing and potential)	Project manager Ulrik Appel	30 April 2022	File	1
3: Development	Development of a new dashboard in the diabetes field in North Denmark within the Regions "Qlik" system. Priority: Type 1 diabetes When the database is developed, there will be an 1 hour online meeting with NAWG and Optimedis about the new model	• Project manager: Ulrik Appel • Quality manager: Amar Nikontovic • Data manager: vacant • Dr. Med. Manfred Zahorka • Head of health data analytics Pascal Wendel • Senior manager Justin Rautenberg	1/4 2022 to 30/6 2022	1 new Dashboard embedded in the Qlik system for use at Steno Diabetes Centre North Denmark	Project manager Ulrik Appel	30 June 2022	A new improved dashboard in Qlik	1

LCF2	Data-driven approach for the North Jutland population: feasibility study							
Activities (from the LAP)	**Actions**	**Actors**	**Timeline**	**KPIs measure (data collection)**				
				KPI	**Who**	**When**	**How**	**Target**
1: Site visit for the end-users of data (Site visit could thematic workshop, site visit on hospital or a conference. Must be matched with needs from other countries NAWGs. A possible solution could be workshops in Denmark at the ICIC 2022 congress in Odense)	Knowledge development for chief physician and chief nurse about the use of data and patient stratification	• Jon Txarramendieta Suarez from KronikGune • Dr. Med. Manfred Zahorka • Project manager: Ulrik Appel	Q1 develop program Q2 visit	4 managers have received an invite	Project manager Ulrik Appel	30 June 2022	Program or Calenda	1
	Knowledge development for Business intelligence consultants about development of dashboards and data sources	• Jon Txarramendieta Suarez from KronikGune • Dr. Med. Manfred Zahorka • Project manager: Ulrik Appel	Q1 develop program Q2 visit	2 Business intelligence consultants have completed exchange visit	Project manager Ulrik Appel	30 June 2022	Program or calendar	1
	Knowledge development for researchers about data sources and research projects	• Jon Txarramendieta Suarez from KronikGune • Dr. Med. Manfred Zahorka • Project manager: Ulrik Appel	Q1 develop program Q2 visit	2 Researchers have completed exchange visit	Project manager Ulrik Appel	30 June 2022	Program or calendar	1

Do

Cycle number (1 or 2)	**1**	
Activity	**KPI**	**Actual value**
LCF 1: Dashboard Step 1: Examination	1 Meeting about relevant programs, software, tools and license	1 = 100%
	1 overview of data sources (both Kronikgune and OptiMedis)	1 = 100%
	1 brief overview of project with diabetes (both Kronikgune and OptiMedis)	1 = 100%
LCF 1: Dashboard Step 2: Analysis	1 Danish overview of Danish health data sources (Both existing and potential	1 = 100%
LCF 1: Dashboard Step 3: Development	1 new Dashboard embedded in the Qlik system for use at Steno Diabetes Centre North Denmark	0 – but startet = 10%
LCF 2: Site Visit	4 managers have received an invite	Total 12 = 100% Manager/Projectmanager at ICIC 2022 = 2, Slovenia (WP7)= 1, Strasbourg (WP7)= 3, Aalborg (WP5)= 6
	2 Business intelligence consultants have completed exchange visit	Total 8 = 100% Business intelligence or Quality manager at ICIC 2022 = 1, Slovenia(WP7) = 1, Strasbourg (WP7)= 1, Aalborg (WP5)= 5
	2 Researchers have completed exchange visit	Total 4 = 100% Researcher at ICIC 2022 = 1, Slovenia (WP7)= 0, Strasbourg = 0, Aalborg (WP5)= 3

QUESTIONS	**ANSWERS**
What was actually implemented? Any deviation from the planned actions	The Examination and Analysis (LCF1) and Site visit (LCF2) are completed. however, the development phase of the Dashboard (LCF1) has been postponed to PDSA part 2 due to shifts in both EPJ and key personnel.
Problems? Unexpected findings? Please describe	There have been problems with the development phase of the dashboard (LCF1) due to new EPJ and problems with site visits (LCF2) due to COVID-19. However, these are problems that are considered to be solvable in PDSA part 2. On the other hand, the project has progressed further with the strategic part (LCF3), which was first planned to start in PDSA part 2. Here, a working group has already been set up with external actors and a strategic note on organization is being prepared.

IMPLEMENTATION PROGRESS OF THE LOCAL GOOD PRACTICE			
0-25%	**25-50%**	**50-75%**	**75-100%**
		x	

Study

Cycle number (1or 2)		**1**				
Activity	**KPI**	**Target value**	**Actual value**	**Reasons for the deviations**	**Mitigation actions implemented**	**Impact of mitigation actions**
LCF 1: Dashboard Step 3: Development	1 new Dashboard embedded in the Qlik system for use at Steno Diabetes Centre North Denmark	1	0	vacant position at the Business Intelligence unit	Dialogue with 2 other consultants from the BI unit (Stine and Camilla) to solve the task of building the reports. The new agreement was that the design of the report is carried out by Steno, which will make a mock up based on input from OptiMedis and Kronikgune. The next step is for the reports to be built from September to December 2022	The task will be part of PDSA part 2 (Activity 1.1 to 1.3)

Act

Cycle number (1 or 2)	1		
Activity	**Maintain**	**Adapt**	**Abandon**
1.1 Dashboard: ***Mock up (Steno)***		X	
1.1 Dashboards: ***Build (BI)***	X		
2.1. Dashboard for of Patients Absence: ***Data extraction (Steno)***	X		
2.2. Dashboard for of Patients Absence: ***Data analysis (Together with the Alexandra Institute)***	X		
2.3. Dashboard for of Patients Absence: ***Build a new dashboard***	X		
3.1. Sustainability and strategic anchoring. ***Write a strategic paper***		X	
3.2. Sustainability and strategic anchoring. ***Dialogue about the paper at the administrative level***		X	
3.3. Sustainability and strategic anchoring. ***Political decision***		X	

QUESTIONS	**ANSWERS**
Any new proposed action for the future?	PDSA Part Two focuses more on the strategic level

2nd PDSA Cycle

Plan

LCF1	Further development of SDCN Data dashboards (Part 2)							
Activities (from the LAP)	**Actions**	**Actors**	**Timeline**	**KPIs measure (data collection)**				
				KPI	**Who**	**When**	**How**	**Target**
1. Building the **Dashboard**	Make a dashboard **Mockup** from input from fit-gap report (PDSA1) (OptiMedis/Kronikgune)	Ulrik Appel and Amar Nikontovic (Sending to OptiMedis and Kronikgune)	August 2022	Make 6 Mockups	Ulrik Appel	Dec. 2022	Copies of Mockups	6
	Prototype meeting of the mockup with health professionals - Head physician - Head nurse - Cross-sectoral employee Brainstorm for new inputs and improvements	Ulrik Appel and Amar Nikontovic	September 2022	3 meeting	Ulrik Appel	Dec. 2022	Calender invitation	3
	Building the final Dashboard	Stine Fly Bay and Camilla Winther Nielsen	Sep. - dec. 2022	1 New Dashboard	Ulrik Appel	Dec. 2022	Screen dump of new dashboard	6
	Final Dialogue with healthcare professional and cross-sectoral employees about use cases of the new dashboard	Ulrik Appel and Tina Heide	Dec. 2022	1 Meeting	Ulrik Appel	Dec. 2022	Calendar invitation	1
2. Data on **patient absences** (Risk factors)	**Data transfer** for external analysis (AI program with Alexandra Institute)	Ulrik Appel and Amar Nikontovic	July 2022	1 transfer of health data	Ulrik Appel	Dec. 2022	Copy of "Standard Contractual Clauses" with Alexandra	1

	Report from the Alexandra Institute (External)	Rasmus Larsen from Alexandra Institute	July – Nov. 2022	1 Report from Alexandra about signal values and possibilities for riskdata	Ulrik Appel	Dec. 2022	One report (Google Translate)	1
	Mock up for a new dashboard with risk of non-attendance	Ulrik Appel and Amar Nikontovic (Sending to OptiMedis and Kronikgune)	Dec. 2022	A mockup where the report's recommendations have been translated into a draft for new risk dashboard	Ulrik Appel	Dec. 2022	One Mock-up	.

LCF2	**Strategic discussion of the population approach in RND (new)**							
Activities (from the LAP)	**Actions**	**Actors**	**Timeline**	**KPIs measure (data collection)**				
				KPI	**Who**	**When**	**How**	**Target**
1: Discussion about **population approach in RND**	Preparation of a **strategic paper** about the strategic use of health data about vulnerability in the North Jutland Region	Ulrik Appel, Bente Koch and Amar Nikontovic Niels Frederik Rottbøll And Gorm Simonsen	August 2022	1 strategic paper (google translate to English)	Ulrik Appel	December	1 paper	1
	Action plan for new specific cross-sectoral initiatives on the basis of the report A: New network with specialists and support functions B: Mapping of legal frameworks	Ulrik Appel, Bente Koch and Amar Nikontovic	Aug. 2022 – Dec. 2022	1 new network	Ulrik Appel	December	1 plan	1

	C: Project on data and vulnerable diabetes patients	Niels Frederik Rottbøll And Gorm Simonsen						
	Mapping of Steno and RND data situation (With Aalborg University)	Ulrik Appel Aalborg University	Aug. 2022 – Dec. 2022	1 Report about Steno's data infrastructure and data issues	Ulrik Appel	December	1 paper	1
	Use of **data on the morning conference**	Ulrik Appel and external consultant	Sep. 2022 – Dec. 2022	1, process about the use af data on morning conference	Ulrik Appel	December	1 paper	1

Do

Cycle number (1 or 2)	2	
Activity	**KPI**	**Actual value**
Dashboard: Mockup	6	6
Dashboard: Prototype meeting	3	3
Dashboard: Building	6	6
Dashboard: Final dialogue	1	1
Patient absence: Data Transfer	1	1
Patient absence: Report	1	1
Patient absence: Mockup	1	1 (see deviation)
Population approach: Strategic paper	1	1
Population approach: Action plan	1	1
Population approach: Mapping	1	1
Population approach: Morning conference	1	(1) (see study)

QUESTIONS	ANSWERS
What was actually implemented? Any deviation from the planned actions	A large number of elements were implemented in JADECARE • Dashboard for patient overview • Dashboard for age distribution of patients • Diabetes Prevalence Dashboard • Geographic dashboards • Generic model for new dashboards (Labka) • Analysis and recommendations* for minimizing absenteeism • Strategic report • Strategic cross-sectoral network *Deviation: Patient absence and mockup: We had expected to create a data report on non-attendance at an individual level, but based on the AI report choose to focus on a group instead (Young men 20-45 years). Therefore, there is no need for a mockup for a dynamic report, since we focus on a group and not individual patients.
Problems? Unexpected findings? Please describe	-

IMPLEMENTATION PROGRESS OF THE LOCAL GOOD PRACTICE			
0-25%	**25-50%**	**50-75%**	**75-100%**
			X

Study

Cycle number	2

Activity	KPI	Target value	Actual value	Reasons for the deviations	Mitigation actions implemented	Impact of mitigation actions
Population approach: Morning conference	One process about the use of data in morning conference	1	(1)	There has been a process, which, however, did not become a concrete proposal. Meeting with Optimedis held the 24. November in Hamborg, where models for "portfolio analysis" was presented for RND's general inspiration. If the model should be suitable for the hospital system its requires a lot of adjustment, development, and involvement of end users / health professionals. After a dialogue with the senior physician, it was decided that the hole process should be "bottom-up" since the medical doctors (end-users) had to be involved from the start and the solution had to be based on their needs. This was not possible within JADECARE 's time frames	This focus area became part of another and larger project in RND and was therefore taken out of JADECARE.	The reports will be developed in 2023 and 2024 based on a "bottom up" approach in another project.

Act

Cycle number (1 or 2)	2		
Activity	**Maintain**	**Adapt**	**Aband**
1. Building the **Dashboard**	We have reached the goal in JADECARE. We are continuously expanding the database with new data sources and reports - also after JADECARE ends. In the future, SDCN will run a dedicated "data track" in the digital health department.		
2. Data on **patient absences** (Risk factors)	We have reached the goal in JADECARE. After JADECARE the focus continues on • male aged 20-45, who have an increased risk of absenteeism based on our AI model		
3. Discussion about **population approach in RND**	We have reached the goal in JADECARE. After JADECARE ends, we continue to maintain the network with the participation of municipalities, general practitioners, and other external partners		

Post-implementation

ITEM	ANSWER
Title and abstract	
Title	Strategic Used of Data in Steno Diabetes Centre NorthDemark (SDCN) in the Region of North Denmark (RND)
Abstract	The strategic use of data in SDCN has a dual focus in JADECARE **1: Further development of SDCN Data dashboards** SDCN already has a database, which, however, is very focused on activity and number of treatments. Through JADECARE, the desire was to switch to a focus on the population's approach and Risk Stratification. RND would like to do this by building new datareports QLIK with help from the JADECARE collaboration. **2: Strategic discussion of the population approach in RND** In addition to a number of new dashboards, it is important to have an organizational development project. Therefore, a network is planned to be established in RND together with a report and action plan for better use of data in the whole organization.
Why did you start?	
Problem description	In the earlier phases of the JADECARE project, it was clear that good practices Kronikgune and OptiMedis had a different approach to data than SDCN. They focused more on the entire population, risk stratification and cross-sectoral strategic collaboration. Through JADECARE, SDCN investigated the possibility of integrating parts of data work from Kronikgune and OptiMedis into RND database.
Available knowledge	SDCN already had a program for data analysis (Qlik sense) and a large number of hospital data sources. These are clinical values from "*Labka*", activities from "Bookplan", discharges from "PAS" and medicinal information from the "medicinal module". During the project, these data sources were transferred to NordEPJ The aim of the work in JADECARE was therefore not about the purchase of software, but instead dialogue about further development and new perspectives on the existing database.
Rationale	The actual rationale behind the project was that SDCN is part of Danish healthcare law and therefore cannot create the same financial incentives and incentives and calculations as primary Germany. But SCDN can be inspired by their strategies and program descripted in the original good practises. Although SDCN does not directly lose funds due to patient absences or geographical health problems, SDCN nevertheless had an interest in optimizing in these areas.
Specific aims	Building new Dashboard, use Risk Stratification on patient absences and having a strategical discussion about how to obtain useful insights from it
What did you do?	
Context	This short version of the project's SWOT analysis shows that the working group assesses that in Denmark we are strong in data and that there is a very large potential in cross-sector collaboration around data. Conversely, GDPR and new data systems present a number of challenges. Precisely for this reason, RND would like to be part of the JADECARE collaboration, to learn from OGPs about how they have met these challenges. **Strengths**

	• RND has a large Data pool, which will be collected in the new NordEPJ • We have a mutual ambition to use data • The staff has a generally high level of competence in relation to data and IT • (almost) Realtime Data on patients **Weaknesses** • DO!!! (it is sometimes difficult to get things done even though data supports new initiatives) • Data across sectors is very difficult • Lack of quality in registration **Opportunities** • Data-driven competence development - adaptative services for patients • Cross-sectoral - exchange data and knowledge with other health actors • Patient empowerment **Threats** • Inappropriate breaches of data definitions and data flows associated with new EHR and other new systems • It is difficult to change the habits within the health field • GDPR
Intervention(s)	The purpose of the LGP was to build a number of dashboards and work more strategically with data. To achieve this there has actually been a large working team (Next Adopter Working Group, NAWG, as it is named) involved. It consisted of 12 participants with a mixed health professional background. This includes a "Core" NAWG of six experts that has participated more actively in some implementation activities such as theme days and thematic workshops: • Head of Digitalization: Tina Heide - Tah@rn.dk • Strategical innovation consultant: Bente Koch bente.p@rn.dk • Data manager: Søren From Knudsen / vacant (Substitute Ulrik Appel) • Quality manager: Amar Nikontovic a.nikontovic@rn.dk • Project manager: Ulrik Appel u.appel@rn.dk • Ceo Steno: Poul Erik Jakobsen poul.erik.jacobsen@rn.dk **1: Building the Dashboard** To build the new dashboard, a large number of data reports from the German and Basque Good Practices have been collected. Their reports are turned into a series of mockups (hand drawings of desired new dashboards) in an internal SDCN workshop. Next, there was a dialogue with healthcare professionals about these mockups before the Business Intelligence unit built the reports for us. Subsequently, there have been renewed discussions with health professionals of the German and Basque Good Practices and version 2.0 of the reports is already planned. Data on patient absences (Risk factors) There have been meetings with both Kronikgune and OptiMedis about working more risk-based. However, SDCN only focuses on diabetes patients and many risk stratification tools focus on all diseases and risk on another level. Therefore, analysis had to be done in a different way. Together with OptiMedis, the focus on "absences" and „diabetes“ was selected. The final risk analysis was developed together with the "Alexandra Institute", who has a number of programs for artificial intelligence.

<table>
<tr><td></td><td>The-Alexandra-Institute received data on 2,649 patients and 31,248 post-ambulatory activities. Based on AI calculations, SDCN has received a proposal to work with different groups with different risk profiles.
2: Strategical discussion about population approach in RND
A network has been set up with participation from:
Department for Regional Development
The Department for International Cooperation
The department for BI and analysis
"The Idea Clinic"
The Department for Quality and the Working Environment
Danish Centre for Health Research
Telecare Nord
Department of Intersectoral Health
"The health profile"
The practice unit (GPs)
Psychiatry
Aalborg University
Institute for Public Health
Institute for Medicine and Health Technology
Centre for general medicine
Aalborg municipality
Frederikshavn Municipality
Five meetings have been held with up to 30 participants and between the meetings a Report (50 pages) has been prepared for political processing
A political decision is expected to be taken after JADECARE is completed and the expectation is that the network will continue.</td></tr>
<tr><td>Study of the Intervention(s)</td><td>No internal follow-up research has been associated with the project.
However, the effects of the project can be seen in the fact that the activities would not have been carried out without JADECARE</td></tr>
<tr><td>Measures</td><td><table>
<tr><th>Activity</th><th>KPI</th><th>Actual value</th></tr>
<tr><td>Dashboard: Mockup</td><td>6</td><td>6 Mockups maded</td></tr>
<tr><td>Dashboard: Prototype meeting</td><td>3</td><td>3 meeting held</td></tr>
<tr><td>Dashboard: Building</td><td>6</td><td>6 dashboards builded</td></tr>
<tr><td>Dashboard: Final dialogue</td><td>1</td><td>1 Final dialogue meeting held</td></tr>
<tr><td>Patient absence: Data Transfer</td><td>1</td><td>1dataset transfed</td></tr>
<tr><td>Patient absence: Report</td><td>1</td><td>1 Report maded</td></tr>
<tr><td>Patient absence: Mockup</td><td>1</td><td>1 model for stratification maded</td></tr>
<tr><td>Population approach: Strategic paper</td><td>1</td><td>1strategic paper written</td></tr>
<tr><td>Population approach: Action plan</td><td>1</td><td>1 Action plan maded</td></tr>
<tr><td>Population approach: Mapping</td><td>1</td><td>1 mapping maded</td></tr>
<tr><td>Population approach: Morning conference</td><td>1</td><td>1 discussen about use of data on morning conference held.</td></tr>
</table></td></tr>
<tr><td>Analysis</td><td>Nothing</td></tr>
<tr><td colspan="2">What did you find?</td></tr>
<tr><td>Results</td><td>1: Building the Dashboard
We have reached the goal in JADECARE.
We are continuously expanding the database with new data sources and reports - also after JADECARE ends.</td></tr>
</table>

	In the future, SDCN will run a dedicated "data track" in the digital health department. 2: Data on **patient absences** (Risk factors) We have reached the goal in JADECARE. After JADECARE the focus continues on • male aged 20-45, who have an increased risk of absenteeism based on our AI model 3: Discussion about **population approach in RND** We have reached the goal in JADECARE. After JADECARE ends, we continue to maintain the network with the participation of municipalities, general practitioners, and other external partners
What does it mean?	
Summary	RND started the project with a number of clear objectives developed in collaboration with Kronikgune and Optimedis. Along the way, the project was affected by COVID-19, replacement of core staff and new EPJ in RND. However, JADECARE has achieved the desired results for RND, which is largely due to a flexible and adaptable approach from Kronikgune and Optimedis. RND has had their data area expanded. Both in the form of new dashboards, but also in the form of new discussions around the strategic use of data. **1: Building the Dashboard** Before JADECARE, we had activity data on patients, but did not use it for prevalence or the population approach We have built a number of new dashboards with input from Kronikgune and OptiMedis, as well as had a good dialogue with health professionals and other end users about the application. Reports are both a good basis for expanding with more data in the area of diabetes, as well as expanding to other areas of health. Data on patient absences (Risk factors) We have got a good overview of which groups are absent. We can use this risk stratification together with health professionals to create a more targeted organization of appointments **2: Strategical discussion about population approach in RND** Before JADECARE, we lacked a network where we could work strategically with data. We have now started a good discussion with a wide range of health actors within the field of diabetes and have reached an agreement that in the future RND must have more focus on data and diabetes
Interpretation	The above work will form the basis for RND to be able to work more strategically with data in the area of diabetes in the future. JADECARE has contributed with new perspectives, networks and concrete input to give RND a solid foundation for this work. Compared to other projects, JADECARE has worked well. This is due to the high level of knowledge at Optimedis and Kronikgune and their flexible approach.
Limitations	There have been 3 major limitations in JADECARE Firstly, COVID-19 caused problems with holding physical meetings and, in addition, made it impossible to involve healthcare professionals to the same degree as expected. Second, RND changed their Electronic Patient Journal (EPJ). So, for most of the second year of the project, 2022, there was no access to data. Furthermore, the BI of SDCN unit was to focus on ensuring the operation of the new system rather than developing new dashboards.

	Finally, the data engineer in the project got a new job and the position had been vacant in the project.
Conclusions	JADECARE has been very useful for SDCN and is sustainable after the project ends, as datadash is rooted in SDCN's core activities. In addition, there is an opportunity to spread the thinking to other areas, as "diabetes diagnosis code" can relatively easily change to other diagnosis codes However, the data can eventually be expanded with more socio-economic data (income, employment and level of education) and PRO data. Both parts will provide a better approach to population data and risk stratification Finally, future projects can benefit from working with artificial intelligence. The upcoming work in 2023 and 2024 will build on experiences, networks and knowledge gained through JADECARE
Other information	
Funding	The main funding of the project has been EU funds through JADECARE, which has primarily gone to working hours and conferences Besides that a large number of expenses (for example the Alexandra Institute) have been paid directly by Steno. Steno is financed by Region Nordjylland and the Novo Nordisk Foundation

The Eurometropole of Strasbourg, France (EUSTRAS)

Pre-implementation

Scope definition

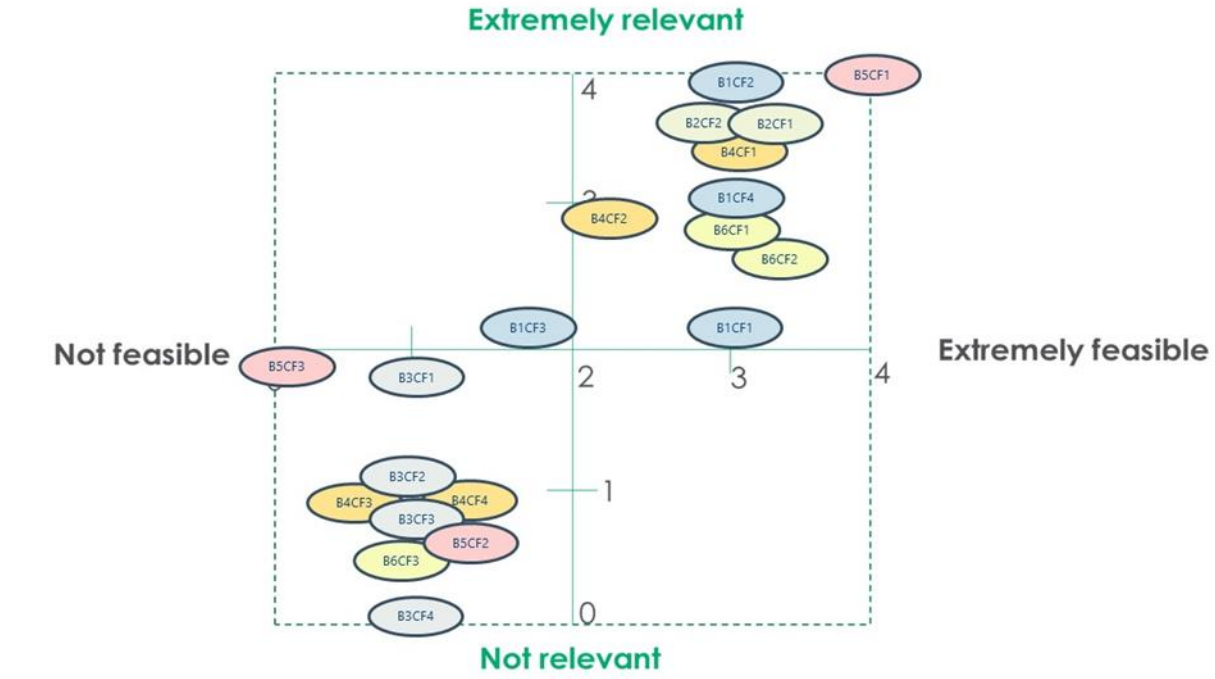
Identified and prioritized needs

Block		Needs (grouped)
Block 1 Shared savings contract with reimbursement/ commissioning organizations	1	Setting up local integrator or alternative
	2	Secure investment and develop "business plan"
	3	Create evidence for improved population health and patient well-being through integrated, performant and cost-effective care (preventive and disease management) interventions
Block 2 A model including strong stakeholder engagement	4	Identify key stakeholders and define local health eco-system
	5	Situation analysis and definition of improvement opportunities
	6	Identify and implement incentive system for stakeholder engagement
Block 3 Electronic integration across providers	7	Define data integration needs (shared patient files, exchange platforms for chronic disease model, IT requirements), implement national data integration standards
	8	Implement data sharing tools (depending on national and reginal IT strategies in health and their implementation plan)
Block 4 Patient involvement and empowerment	9	Put in place a patient participation mechanism
	10	Develop patient activation strategy and design interventions
Block 5 Data-driven management	11	Define outcome indicators and KPIs
	12	Identify analytical needs and implement appropriate strategies
	13	Continuously monitor outcomes and impact of interventions
Block 6 Prevention, health promotion and public health	14	Identify primary prevention and behaviour change priorities with a focus on chronic disease
	15	Develop and launch communication activities
	16	Identification of disease management priorities and implement integrated patient centred care plans

Assessment of Core Features

Core Feature	Relevance	Feasibility
B1 - Shared savings contract with reimbursement/commissioning organizations		
CF1- identifying current contractual arrangements and assessing possibilities for value-based contracting	2	3
CF2- defining data standards and appropriate outcome measures	4	3
CF3- Designing the valued-based payment framework	2	2
CF4- Constructing the analytical model to execute the contract	3	3
B2 - A model including strong stakeholder engagement		
CF1- Identifying and liaising with stakeholder groups	4	3
CF2- Creating appropriate governance structures	4	3
B3 - Electronic integration across providers		
CF1- Assessing state of current health IT integration and IT tools in use	1	2
CF2- Market assessment on tools adequate to improve IT connectivity of providers	1	1

CF3- Training with providers to assess incentives for IT deployment and usability assessment	1	1
CF4- Patient access to their data (Open Notes approach)	0	1
B4 - Patient involvement and empowerment		
CF1- Patient advisory boards	4	3
CF2- Shared-decision making tools and self-management support	3	2
CF3- Comprehensive health checks and health-related goals	1	1
CF4- Providing training on incentives and tools to implement patient centered care	1	1
B5 - Data-driven management		
CF1- Potential analysis tool	4	4
CF2- Performance dashboards	1	1
CF3- FORTA tool to identify over- and underutilization regarding prescriptions	2	0
B6 – Prevention, health promotion and public health		
CF1- Individual treatment plans and care programs	3	3
CF2- Care planning based on Chronic care model	3	3
CF3- Patient coaching	1	1



Final Core Features selected

Priority	Final Core Features
Data driven management	B5CF1: Potential analysis tool
Strong stakeholder engagement	B2CF1: Identifying and liaising with stakeholder groups B2CF2: Creating appropriate governance structures
Shared savings contract	B1CF1: Identifying current contractual arrangements and assessing possibilities for value-based contracting B1CF2: Defining data standards and appropriate outcome measures B1CF4: Constructing the analytical model to execute the contract

Prevention and health promotion	B6CF1: Individual treatment plans and care programs B6CF2: Care planning based on Chronic care model
Patient involvement and empowerment	B4CF1: Patient advisory boards B4CF2: Shared-decision making tools and self-management support

Situation analysis

Strengths	Weakness
1. National strategy "Ma Santé 2022" 2. Local ambitious project managed by EUSTRAS : "Territoires de santé de demain" 3. Established partnership with the local health insurance agency (CPAM) 4. Established partnership with the local health agency (ARS) 5. Establishes partnership with university 6. Competent authority / represent the French ministry of health 7.	1. Unbuild field networks 2. Grouped health data access only 3. PoC not based on a local integrator 4. 3 separated districts selected for the experiment 5. Human resources 6. Local is Strasbourg, and might be far from the ministry
Opportunities	**Threats**
1. Political support 2. Large local consortium 3. IT regional platform for health data 4. A community of innovators that could experiment their solutions 5. Create a new actor/structure in the local health ecosystem 6. COVID-19 crisis has triggered new organisations/way of working, usage etc	1. More of a political decision on the first place than from the field (top – down) 2. Ability to develop a motivated network on the field 3. Ability to communicate / disseminate on the project and method 4. Onboard patients from districts with precarity and cultural specificities 5. Create a new actor/structure 6. Data sharing was refused at a national level with the Health Data Hub 7. Health professional fatigue after COVID-19 crisis

Strategic Intervention Areas

Strategic intervention area	Priority score (1 to 3)	Ranking
Need to develop strong and motivated networks	3	1
Need to establish an economic model based on health and economic data	2	2
Strengthening continuity of care between care levels (inter/intra level)	2	3

Improvement of coordination, cooperation and data (information) sharing between healthcare and social services	1	4

Definition of the LGP and LAP

Local Good Practice

Local Good Practice	Implement population based integrated care in 3 city quarters of Strasbourg
Target population	**Setting(s)**
3 districts in Strasbourg, N= 46 530 insured persons	Aging populations, an increasing prevalence of chronic diseases, lack of health care staff and rising health care costs are dominant health care problems not only in France. Coordinated and integrated health care delivery systems have been identified in France as a possible solution. The City of Strasbourg started to finance preventive care solutions including sports on prescription some 10 years ago using the instrument of a "local health contract" to fund these activities. These solutions developed well over the years and have covered some 4000 patients until 2022. However, the initiative was not well connected with the coordinated multi-professional health care approaches recommended by the French MoH - such as the urban health houses (MUS: maision urbaine de santé) and territorial multi-professional teams (CPTS: communautés professionnelles territoriales de santé).
Main aim	
Develop a population based local integrated care system in three districts of Strasbourg based on the Opti-Medis model and the Quadruple AIM to the local specificities of the Strasbourg Community	

Outcomes	**Local Core Features and their Components**	**Inputs**
Strong and motivated health services provider networks	Unite the stakeholders and decision makers around a population based local integrated care system Co-construct the core features for a proof of concept for an integrated care system	•Coordination Staff Liaise with key players • Decision makers • Healthcare and social professionals
Coordination, cooperation, and data (information) sharing between health and medico-social services		•Coordination Staff Liaise with key players • Decision makers • Healthcare and social professionals
Strengthening continuity of care between care levels (inter/intra level)	Develop and monitor patient centred health programs at the interface between prevention, ambulatory and hospital care for different risk strata and strengthen patient self-management	• Experts and patient representatives for case management and patient pathways • Hospital experts • Health Education specialists • Experts in community medicine, mediation, and health coaching • Marketing/communication experts (health programs, health information)

Establish an economic model based on health and economic data	Develop an economic model to sustain population based integrated care by evaluating the efficiency of health care delivery	Experts in health economy, insurance medicine, study design and data analysis

General description

Strasbourg has a rich portfolio of initiatives and projects targeting innovations in health care deliver, such as care coordination in multi-professional teams, prevention and physical activity initiatives, medico-social services, and digitisation in health. This is backed-up by national and regional health strategies. The local good practice (LGP) focuses on transforming a disease based professionally dominated care system towards a territorial population-based, people centred health system in an urban environment in three Strasbourg districts. It's main pillars are to build strong stakeholder networks of multi-professional nature including people and patient representation following a continuity of care logic; develop health programs and a continuity of care approach towards better patient health and self-management; data based decision support including patient information sharing across provider networks, performance measurement, analytical tools for outcome and impact assessment; increase efficiency of health care delivery system, avoid unnecessary hospitalisation and duplication of services, and develop an economic model to sustain patient centred integrated health systems. Increased efficiency and the economic model will guarantee the continuation of activities after the end of the JADECARE project cycle.

Local Core Feature 1: In-depth analysis of the existing situation to fully understand the field network

- include the OptiMedis approach in the local strategy (CLS)
- Validate a CLS action sheet
- list of health professionals in the three selected districts
- list of adopted physical activity unit partners
- The sport and health prescription pathway from A to Z (data, information system, patients, doctors, other health professionals)
- Analysis of the patient base of each MUS and each district (list of routine and preventive activities)
- Identify key partners and barriers
- map local, regional, national, and international experience and support mechanisms for the planned initiatives

Local Core Feature 2 Creating the network and developing the elements for a successful proof of concept

- Launching a call for external service provider to lead workshops on the needs of the MUS
- Launching a human resource hiring for the prevention and care pathway component
- Launching a call for external service provider on IS (shared patient file) and data (access to SNDS data)

Local Core Feature 3: Co-construct the core features for a proof of concept for an integrated care system

- identify potential efficiency gaps for the prevention and management of NCDs
- develop an analytic model to show population-based effects of integrated people centred health services using the Triple Aims of the Value Based Care (VBC) framework and define indicators

Feature 4: Implement shared patient information system within healthcare and social professionals in the 3 districts

- agree on the core characteristics for shared patient information at the urban district level and review currently used systems
- IT integration following national e-health strategy (Ségur numérique, masanté2022)

Local Core Feature 5: Develop and monitor patient centred health programs at the interface between prevention, ambulatory and hospital care for different risk strata and strengthen patient self-management

- conduct a population segmentation exercise by disease group and identify needs for each population strata
- develop and implement patient pathways and case management systems for specific NCDs

- Strengthen secondary, and tertiary prevention programs for NCDs
- develop communication and marketing strategies to increase patient subscription to preventive care programs
- develop and implement programs for strengthening patient self-management programs
- integrate and share innovations

Local Core Feature 6: Develop an economic model to sustain population based integrated care by evaluating the efficiency of health care delivery and re-invest generated savings in patient empowerment and preventive services.

- Identify current funding mechanisms for integrated care and its elements
- Describe and analyse economic benefits of integrated care within the defined implementation area.
- Develop a business plan for a Strasbourg district based integrated care model

Local Action Plan

Local Good Practice	**Implement population based integrated care in 3 city quarters of Strasbourg**
Target population	**Setting(s)**
3 districts in Strasbourg, N= 46 530 insured persons	Aging populations, an increasing prevalence of chronic diseases, lack of health care staff and rising health care costs are dominant health care problems not only in France. Coordinated and integrated health care delivery systems have been identified in France as a possible solution. The City of Strasbourg started to finance preventive care solutions including sports on prescription some 10 years ago using the instrument of a "local health contract" to fund these activities. These solutions developed well over the years and have covered some 4000 patients until 2022. However, the initiative was not well connected with the coordinated multi-professional health care approaches recommended by the French MoH - such as the urban health houses (MUS: maision urbaine de santé) and territorial multi-professional teams (CPTS: communautés professionnelles territoriales de santé).
Main aim	
Develop a population based local integrated care system in three districts of Strasbourg based on the Opti-Medis model and the Quadruple AIM to the local specificities of the Strasbourg Community	
General description	
Strasbourg has a rich portfolio of initiatives and projects targeting innovations in health care deliver, such as care coordination in multi-professional teams, prevention and physical activity initiatives, medico-social services, and digitisation in health. This is backed-up by national and regional health strategies. The local good practice (LGP) focuses on transforming a disease based professionally dominated care system towards a territorial population-based, people centred health system in an urban environment in three Strasbourg districts. It's main pillars are to build strong stakeholder networks of multi-professional nature including people and patient representation following a continuity of care logic; develop health programs and a continuity of care approach towards better patient health and self-management; data based decision support including patient information sharing across provider networks, performance measurement, analytical tools for outcome and impact assessment; increase efficiency of health care delivery system, avoid unnecessary hospitalisation and duplication of services, and develop an economic model to sustain patient centred	

integrated health systems. Increased efficiency and the economic model will guarantee the continuation of activities after the end of the JADECARE project cycle.	
Related oGPs and CFs	OptiMedis all CFs

Local Core Feature 1	In-depth analysis of the existing situation to fully understand the field network

SMART objective: Full mapping of two existing key systems in the territories

Activities	Actors	Resources	Setting(s)	Timeline	Key Performance Indicators
• Include the OptiMedis approach in the local strategy (CLS)	• Institutional • Ville de Strasbourg • ARS • MUS	• expert staff time • GIP MS • EMS	• Strasbourg districts, • EUSTRAS	• Q4 2021	• number of preparatory meetings
• Validate a CLS action sheet	• Institutional • Ville de Strasbourg • ARS	• expert staff time •	• EUSTRAS	• Q1 2022	• CLS Signature with an integrated care focus, available (Y/N)
• List all health professionals in the 3 selected districts	• Institutional • OptiMedis • LGP working group	• expert staff time • LGP working group coordination • OptiMedis	• Selected Strasbourg districts	• Q4 2021	• List, available (Y/N) • map, available (Y/N) • Analysis of relationships
• List all Adapted physical activity unit partners •	• GIP MS • OptiMedis • LGP working group	• expert staff time • GIP MS • EMS • OptiMedis	• EUSTRAS • Selected Strasbourg districts	• Q4 2021	• List, available (Y/N) • map, available (Y/N)

• The sport and health prescription pathway from A to Z (data, information system, patients, doctors, other health professionals)	• GIP MS • OptiMedis • LGP working group • existing professional networks • MUS	• expert staff time • network partners • LGP working group coordination • OptIMedis	• EUSTRAS • Selected Strasbourg districts	• Q4 2021	• Summary document of the journey, available (Y/N) • recommendations on gaps/needs, available (Y/N)
• Analysis of the patient database of each MUS and each district (list of routine and preventive activities)	• network partners • OptIMedis • LGP working group	• expert staff time • LGP working group coordination • OptIMedis	• Strasbourg districts	• Q1 2022	• Synthesis reports , available (Y/N) • recommendations on gaps/needs, available (Y/N)
• Identify key partners and barriers	• network partners • OptIMedis • LGP working group	• expert staff time • LGP working group coordination • OptiMedis	• EUSTRAS • Selected Strasbourg districts	• Q1 2022	• List of convinced adopters , available (Y/N) • List of challenges, available (Y/N) • recommendations on gaps/needs, available (Y/N)
• map local, regional, national, and international experience and support mechanisms for the planned initiatives	• network partners • OptiMedis	• Expert staff time • OptiMedis	• Strasbourg districts	• Q1 2022	• Synthesis report, available (Y/N) • recommendations on

	LGP working group				gaps/needs, available (Y/N) •
Activities	**Actors**	**Resources**	**Setting(s)**	**Timeline**	**KPIs**

Local Core Feature 2	Creating the network and developing the elements for a successful proof of concept				
SMART objective: Developing the resources needed to run the network					
Activities	**Actors**	**Resources**	**Setting(s)**	**Timeline**	**Key Performance Indicators**
• Launching a call for external service provider to lead workshops on the needs of the MUS/districts/healthcare professionals	• Opti-Medis • EUSTRAS •	• EMS	• regional • Strasbourg city	• Q4 2021	• Number of applications, • provider selected (Y/N)
• Launching a human resource hiring for the prevention and care pathway component	• Opti-Medis • EUSTRAS •	• Ville de Strasbourg / EMS	• Strasbourg	Q4 2021	• new resource, available (Y/N)
• Launching a call for external service provider on IS (shared patient file) and data (access to SNDS data)	• Opti-Medis • EUSTRAS •	• EMS	• Strasbourg	Q4 2021	• Number of applications provider selected (Y/N)

Priorities 3 to 6 are conditional on the achievement of priorities 1 and 2. They will be clarified/reformulated if/when priorities 1 and 2 are achieved.

Local Core Feature 3	Co-construct the core features for a proof of concept for an integrated care system				
SMART objective: Define prototypes of key pillars of the integrated care concept at district level					
Activities	**Actors**	**Resources**	**Setting(s)**	**Timeline**	**Key Performance Indicators**
• identify potential efficiency gaps for the prevention and	• health professionals, • medico-social care experts • patient representatives	• various reports of existing studies • expert staff time	• regional • Strasbourg city • Strasbourg districts	• Q2 2022	• List of areas for improvement, available (Y/N) • recommendations on

management of 1 or 2 chronic disease	• Sport-Santé • OptiMedis • EUSTRAS	• LGP working group coordination			gaps/needs, available (Y/N)
• Develop an analytic model to show population-based effects of integrated people centred health services using the Triple Aims of the Value Based Care (VBC) framework and define indicators	• health analysts • health professionals • epidemiologists and survey staff • CPAM and ARS • Sport-Santé • OptiMedis • EUSTRAS	• expert staff time • agreements for utilisation of health data • LGP working group coordination	• Strasbourg	Q4 2022	• concept paper and/or analytic model, available (Y/N) •

Local Core Feature 4	Support the implementation of a shared patient information system among healthcare professionals in the 3 districts				
SMART objective: Patient data is shared with all actors participating in patient care pathways					
Activities	**Actors**	**Resources**	**Setting(s)**	**Timeline**	**Key Performance Indicators**
• agree on the core characteristics for shared patient information at the district level and review currently used systems	• Health professionals • CPTS, MUS staff • other TSD projects • actors national e-health strategy • OptiMedis • EUSTRAS	• expert staff time • LGP working group coordination •	• Strasbourg • Grand-Est region	• Q1 2022	• Agreed list of features for district patient information, available (Y/N)
• IT integration following national e-health strategy (ségur numérique, ma santé2022)	• TSD projects • CPTS, MUS • Pulsy • IT experts • health professionals • OptiMedis • EUSTRAS	• expert staff time • LGP working group coordination • Service provider	• Strasbourg districts	Q4 2022	• List of remaining gaps , available (Y/N) • recommendations on gaps/needs, available (Y/N)

		• OptiMedis			

Local Core Feature 5	Develop and monitor patient centred health programs at the interface between prevention, outpatient and Inpatient care for different risk strata and strengthen patient self-management

SMART objective: At least xx patients (to be defined) are recruited in patient programs and apply patient self-management

Activities	**Actors**	**Resources**	**Setting(s)**	**Timeline**	**Key Performance Indicators**
• conduct a population segmentation exercise by disease group and identify needs for each population strata for 1 or 2 chronic disease	• health professionals • hospital based NCD experts, • district network participants • representatives of successful pilot projects (FHF?) • OptiMedis • EUSTRAS	• expert staff time • LGP working group coordination • Service provider • OptiMedis • national and international examples of respective tools	• Strasbourg districts • Strasbourg hospitals	• Q1 2022	• risk strata for at least 2 disease groups, available (Y/N)
develop and implement patient pathways and case management systems for 1 or 2 chronic diseases	health professionals hospital based NCD experts, district network participants OptiMedis EUSTRAS	expert staff time	Strasbourg ARS Grand-Est	• Q2 2022	• Patient pathways and patient programs for at least 2 disease groups, available (Y/N)
Strengthen secondary, and tertiary prevention programs for 1 or 2 chronic disease	health professionals hospital based NCD experts, district network participants GIP-MS and Associations patient reps mediators/coaches OptiMedis EUSTRAS	expert staff time LGP working group coordination Service provider OptiMedis	Strasbourg city Strasbourg districts	• Q3 2022	• prevention actions for each patient program, available (Y/N) •

develop communication and marketing strategies to increase patient subscription to preventive care programs	marketing experts district network participants GIP-MS Health service OptiMedis EUSTRAS	communication experts communication platform LGP working group coordination Service provider OptiMedis	Strasbourg districts	• Q4 2022	• communication material, available (Y/N) •
develop and implement programs for strengthening patient self-management programs	health education specialists, district network participants Patient reps OptiMedis EUSTRAS	health education courses health mediators/coaches program LGP working group coordination Service provider OptiMedis	Strasbourg districts	• Q4 2022	• training course and coaching program for patient self-management, available (Y/N) •
integrate and share innovations	district network participants OptiMedis EUSTRAS	funds expert time LGP working group coordination OptiMedis	Strasbourg	• Q4 2022	• At least two meetings/conferences organised to share Strasbourg Integrated Care experience (Y/N)

Local Core Feature 6	Develop an economic model to sustain population based integrated care by evaluating the efficiency of health care delivery and re-invest generated savings in patient empowerment and preventive services.				
SMART objective: A business model for a district based integrated care program					
Activities	Actors	Resources	Setting(s)	Timeline	Key Performance Indicators
• Identify current funding mechanisms for integrated care and its elements	• Health professionals, • EMS Strasbourg • CPAM • ARS • OptiMedis • EUSTRAS	• Expert staff time • LGP working group coordination • OptiMedis •	• district • city • Region Grand Est • National	• Q1 2022	• List of support initiatives and funding sources, available (Y/N)

• Describe and analyse economic benefits of integrated care within the defined implementation area.	• CPAM, ARS • Sport Santé • OptiMedis • EUSTRAS	• Expert staff time • previous reports and studies • LGP working group coordination • OptiMedis •	• Strasbourg	Q4 2022	• Report available (Y/N) • • report published (Y/N) •
• Develop a business plan for a Strasbourg district based integrated care model	• district network participants • CPAM • OptiMedis EUSTRAS	• Expert staff time • LGP working group coordination • OptiMedis •	• Strasbourg	• Q4 2022	• business plan for district/Strasbourg integrated care unit, available (Y/N) •

Implementation

1st PDSA Cycle

Plan

LCF1	In-depth analysis of the existing situation to fully understand the field network							
Activities (from the LAP)	**Actions**	**Actors**	**Timeline**	**KPIs MEASURE**				
				KPIs (from the LAP)	Who will collect the data?	When will the data be collected?	How will the data be collected?	Target value
Include the OptiMedis approach in the local strategy (CLS)	• Action 1	• Institutional • Ville de Strasbourg • ARS • MUS	• Q4 2021	number of preparatory meetings	• EUSTRAS	• monthly	• meeting minutes]	• 5.
Validate a CLS action sheet	•	• Institutional • Ville de Strasbourg • ARS	• Q1 2022	CLS Signature with an integrated care focus, available (Y/N)	• EUSTRAS	• Q2	• signed document	• 1
List all health professionals in the 3 selected districts	•	• Institutional • OptiMedis • LGP working group	• Q4 2021	List, available (Y/N) Map available (Y/N) Analysis of relationships	• GIP	• Q1	• list	• 1
List all Adapted physical activity unit partners	• [….]	• GIP MS • OptiMedis • LGP working group	• Q4 2021	List, available (Y/N) map, available (Y/N)	• GIP	• Q2	• list	• 1

The sport and health prescription pathway from A to Z (data, information system, patients, doctors, other health professionals)	•	• GIP MS • OptiMedis • LGP working group • existing professional networks • MUS	• Q4 2021	Summary document of the journey, available (Y/N) recommendations on gaps/needs, available (Y/N)	• GIP, OM	• Q2	• report	• 1
Analysis of the patient database of each MUS and each district (list of routine and preventive activities)	•	• network partners • OptIMedis • LGP working group	• Q1 2022	Synthesis reports , available (Y/N) recommendations on gaps/needs, available (Y/N)	• GIP, OM, EUSTRAS	• Q2	• report, presentation	• 1
Identify key partners and barriers	• [….]	• network partners • OptIMedis • LGP working group	• Q1 2022	List of convinced adopters available (Y/N) List of challenges, available (Y/N) recommendations on gaps/needs, available (Y/N)	• EUSTRAS, OM, GIP	• Q2	• lists, recommendations	• [….]
map local, regional, national, and international experience and support mechanisms for the planned initiatives	•	• network partners • OptiMedis • LGP working group	• Q1 2022	Synthesis report, available (Y/N) recommendations on gaps/needs, available (Y/N)	• GIP, OM	• Q2	• report	continuous
LCF2	Creating the network and developing the elements for a successful proof of concept							
Activities (from the LAP)		**Actors**	**Timeline**	**KPIs MEASURE**				

	Actions			KPIs (from the LAP)	Who will collect the data?	When will the data be collected?	How will the data be collected?	Target value
Launching a call for external service provider to lead workshops on the needs of the MUS/districts/ healthcare professionals	• Action 1	• OptiMedis • EUSTRAS	• Q4 2021	Number of applications; provider selected (Y/N)	• EUSTRAS • GIP	• Q2	• contract	• 1
Launching a human resource hiring for the prevention and care pathway component	• [….]	• OptiMedis • EUSTRAS	• Q4 2021	new resource, available (Y/N)	• EUSTRAS • GIP	• Q2	• job description • job ad	• 1
Launching a call for external service provider on IS (shared patient file) and data (access to SNDS data)	• [….]	• OptiMedis • EUSTRAS •	• Q4 2021	Number of applications; provider selected (Y/N)	• EUSTRAS • OM	• [….]	• [….]	• [….]
	Priorities 3 to 6 are conditional on the achievement of priorities 1 and 2. They will be clarified/reformulated if/when priorities 1 and 2 are achieved.							
LCF3	Co-construct the core features for a proof of concept for an integrated care system							
Activities (from the LAP)		**Actors**	**Timeline**	**KPIs MEASURE**				

	Actions			KPIs (from the LAP)	Who will collect the data?	When will the data be collected?	How will the data be collected?	Target value
identify potential efficiency gaps for the prevention and management of 1 or 2 chronic disease	• Action 1	• health professionals, • medico-social care experts • patient representatives • Sport-Santé • OptiMedis • EUSTRAS	• Q2 2022	List of areas for improvement, available (Y/N), recommendations on gaps/needs, available (Y/N)	• EUSTRAS • GIP • OM	• Q2	• data analysis GIP, CPAM, ARS	• report
Develop an analytic model to show population-based effects of integrated people centred health services using the Triple Aims of the Value Based Care (VBC) framework and define indicators	• [….]	• health analysts • health professionals • epidemiologists and survey staff • CPAM and ARS • Sport-Santé • OptiMedis • EUSTRAS	• Q4 2022	concept paper and/or analytic model, available (Y/N)	• EUSTRAS • GIP • CPAM • OM	• Q4	• data analysis GIP, CPAM, ARS	• report, conference presentation
LCF4	Support the implementation of a shared patient information system among healthcare professionals in the 3 districts							
Activities (from the LAP)	**Actions**	**Actors**	**Timeline**	KPIs (from the LAP)	Who will collect the data?	When will the data be collected?	How will the data be collected?	Target value

agree on the core characteristics for shared patient information at the district level and review currently used systems	• Action 1	• Health professionals • CPTS, MUS staff • other TSD projects • actors national e-health strategy • OptiMedis • EUSTRAS	• Q1 2022	Agreed list of features for district patient information, available (Y/N)	• EUSTRAS • GIP	• Q1	• review existing systems	• report
IT integration following national e-health strategy (ségur numérique, ma santé2022)	• [….]	• TSD projects • CPTS, MUS • Pulsy • IT experts • health professionals • OptiMedis • EUSTRAS	• Q4 2022	List of remaining gaps, available (Y/N)¸recommendations on gaps/needs, available (Y/N)	• GIP • CPTS • OM	• Q4	• list of applied tools	• list
LCF5	Develop and monitor patient centred health programs at the interface between prevention, outpatient and Inpatient care for different risk strata and strengthen patient self-management							
Activities (from the LAP)	**Actions**	**Actors**	**Timeline**	KPIs (from the LAP)	Who will collect the data?	When will the data be collected?	How will the data be collected?	Target value

conduct a population segmentation exercise by disease group and identify needs for each population strata for 1 or 2 chronic diseases	• Action 1	• health professionals • hospital based NCD experts, • district network participants • representatives of successful pilot projects (FHF?) • OptiMedis • EUSTRAS	• Q1 2022	risk strata for at least 2 disease groups, available (Y/N)	• GIP • OM • hospital bases NCD experts	• Q1	• health pathway structure	• 2
develop and implement patient pathways and case management systems for 1 or 2 chronic diseases	• [….]	• health professionals • hospital based NCD experts, • district network participants • OptiMedis • EUSTRAS	• Q2 2022	Patient pathways and patient programs for at least 2 disease groups, available (Y/N)	• GIP • OM • hospital bases NCD experts	• Q2	• sample health pathways	• 2
Strengthen secondary, and tertiary prevention programs for 1 or 2 chronic diseases	• [….]	• health professionals • hospital based NCD experts, • district network participants • GIP-MS and Associations • patient reps • mediators/coaches • OptiMedis	• Q3 2022	prevention actions for each patient program, available (Y/N)	• GIP • CPTS • CHU • QM	• Q3	• list of prevention programs	• 3

		• EUSTRAS						
develop communication and marketing strategies to increase patient subscription to preventive care programs	•	• marketing experts • district network participants • GIP-MS • Health service • OptiMedis • EUSTRAS	• Q4 2022	communication material, available (Y/N)	• GIP	• Q4	• list available material and actions	• 2
develop and implement programs for strengthening patient self-management programs	•	• health education specialists, • district network participants • Patient reps • OptiMedis • EUSTRAS	• Q4 2022	training course and coaching program for patient self-management, available (Y/N)	• GIP • CPTS • CHU • UGECAM	• Q4	• list of training courses • list of participants	• 2
integrate and share innovations	•	• district network participants • OptiMedis • EUSTRAS	• Q4 2022	At least two meetings/conferences organised to share Strasbourg Integrated Care experience (Y/N)	• GIP • CPAM • OM	• Q4	• conference participations	• 2
LCF6	Develop an economic model to sustain population based integrated care by evaluating the efficiency of health care delivery and reinvest generated savings in patient empowerment and preventive services.							
Activities (from the LAP)	**Actions**	**Actors**	**Timeline**	KPIs (from the LAP)	Who will collect the data?	When will the data be collected?	How will the data be collected?	Target value

Identify current funding mechanisms for integrated care and its elements	• Action 1	• Health professionals, • EMS Strasbourg • CPAM • ARS • OptiMedis • EUSTRAS	• Q1 2022	List of support initiatives and funding sources, available (Y/N)	• EUSTRAS • OM • CHU • GIP	• Q1	• meeting minutes	• list
Describe and analyse economic benefits of integrated care within the defined implementation area.	• [….]	• CPAM, ARS • Sport Santé • OptiMedis • EUSTRAS	• Q4 2022	Report available (Y/N)¸report published (Y/N)	• CPAM • GIP • EUSTRAS • OM	• Q4	• study on GIP and CPAM data	• presentation
Develop a business plan for a Strasbourg district based integrated care model	• [….]	• district network participants • CPAM • OptiMedis • EUSTRAS	• Q4 2022	business plan for district/Strasbourg integrated care unit, available (Y/N)	• OM • EUSTRAS • GIP	• Q4	• report	• 1

Do

Local Action Plan: Implement oGP population based integrated care in 3 city quarters 1			
LCF1	In-depth analysis of the existing situation to fully understand the field network		
Activity	**KPI**	**Target value**	**Actual value**
Include the OptiMedis approach in the local strategy (CLS)	number of preparatory meetings	5	5
Validate a CLS action sheet	CLS Signature with an integrated care focus, available (Y/N)	available	Not available

List all health professionals in the 3 selected districts	List, available (Y/N); Map available (Y/N); Analysis of relationships	avaiable	Available for doctors
List all Adapted physical activity unit partners	List, available (Y/N); map, available (Y/N)	available	Available
The sport and health prescription pathway from A to Z (data, information system, patients, doctors, other health professionals)	Summary document of the journey, available (Y/N); recommendations on gaps/needs, available (Y/N)	2 pathways	Partly available, the relationship between Dr's prescriptions and patient inscription into physical activity programs is unknown
Analysis of the patient database of each MUS and each district (list of routine and preventive activities)	Synthesis reports, available (Y/N); recommendations on gaps/needs, available (Y/N)	available	Not available – collaboration with Dr's offices limited
Identify key partners and barriers	List of convinced adopters available (Y/N); List of challenges, available (Y/N); recommendations on gaps/needs, available (Y/N)	available	Available for GIP MSS, not for Dr's offices
map local, regional, national, and international experience and support mechanisms for the planned initiatives	Synthesis report, available (Y/N); recommendations on gaps/needs, available (Y/N)	ongoing	Ongoing

LCF2	Creating the network and developing the elements for a successful proof of concept		
Activity	**KPI**	**Target Value**	**Actual value**
Launching a call for external service provider to lead workshops on the needs of the MUS/districts/ healthcare professionals	• Number of applications, • provider selected (Y/N)	available	Not available, CLS not yet signed
Launching a human resource hiring for the prevention and care pathway component	new resource, available (Y/N)	available	Not available, CLS not yet signed
Launching a call for external service provider on IS (shared patient file) and data (access to SNDS data)	Number of applications provider selected (Y/N)	Available	Not available, CLS not yet signed

LCF3	Co-construct the core features for a proof of concept for an integrated care system

Activity	KPI	Target value	Actual value
identify potential efficiency gaps for the prevention and management of 1 or 2 chronic disease	• List of areas for improvement, available (Y/N) • recommendations on gaps/needs, available (Y/N)	available	Available for GIP MSS, collaboration with MUS and district physicians limited
Develop an analytic model to show population-based effects of integrated people centred health services using the Triple Aims of the Value Based Care (VBC) framework and define indicators	concept paper and/or analytic model, available (Y/N)	available	analysis of SSSO and health care consumption data, presentation at ICIC 2022, work continues
LCF4	Support the implementation of a shared patient information system among healthcare professionals in the 3 districts		
Activity	KPI	Target Value	Actual value
agree on the core characteristics for shared patient information at the district level and review currently used systems	• Agreed list of features for district patient information, available (Y/N)	available	Improved dababase for SSSO but lack of integration with Dr's offices
IT integration following national e-health strategy (ségur numérique, ma santé2022)	• List of remaining gaps, available (Y/N) • recommendations on gaps/needs, available (Y/N)	Available	Incomple

LCF5	Develop and monitor patient centred health programs at the interface between prevention, outpatient and Inpatient care for different risk strata and strengthen patient self-management		
Activity	**KPI**	**Target Value**	**Actual value**
conduct a population segmentation exercise by disease group and identify needs for each population strata for 1 or 2 chronic diseases	• risk strata for at least 2 disease groups, available (Y/N)	available	Not started – planned as part of the discussion on patient pathways, prioritised disease groups: Diabetes and heart failure

develop and implement patient pathways and case management systems for 1 or 2 chronic diseases	Patient pathways and patient programs for at least 2 disease groups, available (Y/N)	available	Partially, meetings with CPAM but no active working group, work on patient pathways planned for Q3, Case management unlikely
Strengthen secondary, and tertiary prevention programs for 1 or 2 chronic diseases	prevention actions for each patient program, available (Y/N)	available	available
develop communication and marketing strategies to increase patient subscription to preventive care programs	communication material, available (Y/N)	available	GIP MSS website development ongoing,
develop and implement programs for strengthening patient self-management programs	training course and coaching program for patient self-management, available (Y/N)	available	not started yet, possibly collaboration with UGECAM
integrate and share innovations	At least two meetings/ conferences organised to share Strasbourg Integrated Care experience (Y/N)	Available	ICIC 22, Asssise Sport Santé, ICIC 23 planned

LCF6	Develop an economic model to sustain population based integrated care by evaluating the efficiency of health care delivery and re-invest generated savings in patient empowerment and preventive services.		
Activity	**KPI**	**Target value**	**Actual value**
Identify current funding mechanisms for integrated care and its elements	• List of support initiatives and funding sources, available (Y/N)	available	completed
Describe and analyse economic benefits of integrated care within the defined implementation area.	Report available (Y/N) report published (Y/N)	Available	Study on effects of SSSO on health care consumption done, to be continued
Develop a business plan for a Strasbourg district based integrated care model	business plan for district/Strasbourg integrated care unit, available (Y/N)	Available	Not started

QUESTIONS	ANSWERS
What was actually implemented? Any deviation from the planned actions	Network development is mostly limited to preventive care, the ARS and the insurer CPAM. All LCFs related to these groups are mostly implemented. The inclusion of health professionals particularly for ambulatory care remains difficult, probably due to missing incentive systems. LCF 1; LCF 3, LCF 5 and LCF 6 are on target. LCF 2 Is delayed due to delays in signing the CLS and LCF4 is unlikely to be implemented in time due to the current lack of collaboration with medical practices
Problems? Unexpected findings? Please describe	Integrating project content into the Strasbourg 5 year health plan was delayed so that additional funding for project operations is not yet available, Collaboration with medical staff and group practices was more difficult than expected. A fruitful collaboration was established however, between GIP MSS and CPAM, the new constitution of a multi-professional health network in Strasbourg might be an opportunity

IMPLEMENTATION PROGRESS OF THE LOCAL GOOD PRACTICE			
0-25%	**25-50%**	**50-75%**	**75-100%**
		X	

Study

Cycle number (1or 2)		**1**				
LCF1		In-depth analysis of the existing situation to fully understand the field network				
Activity	**KPI**	**Target value (from PLAN)**	**Actual value (from DO)**	**Reasons for the deviations**	**Mitigation actions implemented**	**Impact of mitigation actions**
Include the OptiMedis approach in the local strategy (CLS)	number of preparatory meetings	5	5	No deviation		
Validate a CLS action sheet	CLS Signature with an integrated care focus, available (Y/N)	**1**	Not available	Delay in signature	Focus on activities, which do not need additional funding	Advancement of certain topics compared to others, which need additional funding

List all health professionals in the 3 selected districts	List, available (Y/N); Map available (Y/N); Analysis of relationships	1	Partly available	Focus on Drs and preventive care, mobilisation of district resources delayed	none	General focus on developing the SSSO approach and complementary services
List all Adapted physical activity unit partners	List, available (Y/N); map, available (Y/N)	1	Available	No deviation		
The sport and health prescription pathway from A to Z (data, information system, patients, doctors, other health professionals)	Summary document of the journey, available (Y/N); recommendations on gaps/needs, available (Y/N)	1	Partly available, the relationship between Dr's prescriptions and patient inscription into physical activity programs is unknown	Delay in mobilising physicians to work on patient pathways	Move to Q3 and Q4, preventive care was introduced into the CPTS Strasbourg Ville program	Overall delay to develop stronger linkages between care and SSSO
Analysis of the patient database of each MUS and each district (list of routine and preventive activities)	Synthesis reports, available (Y/N); recommendations on gaps/needs, available (Y/N)	1	Not available – collaboration with Dr's offices limited	No interest physician teams - abandoned	Focus on CPAM data for the Strasbourg city quarters selected	Fruitful collaboration between GIP MSS and CPAM
Identify key partners and barriers	List of convinced adopters available (Y/N); List of challenges, available (Y/N); recommendations on gaps/needs, available (Y/N)	1	Available for GIP MSS, not for Dr's offices	Low interest of Drs in ambulatory care	Focus on further developing preventive care	Analyses of GIP MSS programs with recommendations done
map local, regional, national, and international experience and support mechanisms for the planned initiatives	Synthesis report, available (Y/N); recommendations on gaps/needs, available (Y/N)	ongoing	ongoing	No deviation		

LCF2	Creating the network and developing the elements for a successful proof of concept

Activity	KPI	Target value (from PLAN)	Actual value (from DO)	Reasons for the deviations	Mitigation actions implemented	Impact of mitigation actions
Launching a call for external service provider to lead workshops on the needs of the MUS/districts/ healthcare professionals	Number of applications; provider selected (Y/N)	1	Not available, CLS not yet signed	Delay signing CLS	none	Delay or cancel activities needing additional funds
Launching a human resource hiring for the prevention and care pathway component	new resource, available (Y/N)	1	Not available, CLS not yet signed	Delay signing CLS	none	Delay or cancel activities needing additional funds
Launching a call for external service provider on IS (shared patient file) and data (access to SNDS data)	Number of applications; provider selected (Y/N)	1	Not available, CLS not yet signed	Delay signing CLS	none	Delay or cancel activities needing additional funds

LCF3	Co-construct the core features for a proof of concept for an integrated care system

Activity	KPI	Target value (from PLAN)	Actual value (from DO)	Reasons for the deviations	Mitigation actions implemented	Impact of mitigation actions
identify potential efficiency gaps for the prevention and management of 1 or 2 chronic disease	List of areas for improvement, available (Y/N)¸ recommendations on gaps/needs, available (Y/N)	report	Available for GIP MSS, collaboration with MUS and district physicians limited	Difficulties working with ambulatory care phyisicians	Focus on preventive care activities, Promoting CPTS programs	Positive development in further developing preventive care
Develop an analytic model to show population-based effects of integrated people centred health services using the Triple Aims of the Value Based Care (VBC) framework and define indicators	concept paper and/or analytic model, available (Y/N)	report¸conference presentation	Planned for Q4 22, partially completed through analysis of SSSO and health care consumption data, presentation at ICIC 2022	Implementation advanced	none	none

LCF4	Support the implementation of a shared patient information system among healthcare professionals in the 3 districts					
Activity	**KPI**	**Target value (from PLAN)**	**Actual value (from DO)**	**Reasons for the deviations**	**Mitigation actions implemented**	**Impact of mitigation actions**
agree on the core characteristics for shared patient information at the district level and review currently used systems	Agreed list of features for district patient information, available (Y/N)	report	Partially done on the basis of SSSO Information, but lack of collaboration with Dr's offices	e-health strategies insufficiently implemented	none	Activity cancelled for PDSA 2
IT integration following national e-health strategy (ségur numérique, ma santé2022)	List of remaining gaps, available (Y/N),recommendations on gaps/needs, available (Y/N)	list	Target Q4 but unlikely to be completed	e-health strategies insufficiently implemented	Communication and participation in	Activity cancelled for PDSA 2, possible use of "mon espace santé" for documenting GIP MSS results

LCF5	Develop and monitor patient centred health programs at the interface between prevention, outpatient and Inpatient care for different risk strata and strengthen patient self-management					
Activity	**KPI**	**Target value (from PLAN)**	**Actual value (from DO)**	**Reasons for the deviations**	**Mitigation actions implemented**	**Impact of mitigation actions**
conduct a population segmentation exercise by disease group and identify needs for each population strata for 1 or 2 chronic diseases	risk strata for at least 2 disease groups, available (Y/N)	2	Not started – planned as part of the discussion on patient pathways, prioritised disease groups: Diabetes and heart failure	The development of patient pathways is delayed	None	Different types of preventive care interventions based on patient ability will be implemented in next version of Prescri'mouv. The relationship with clinical classification of morbidity needs to be established
develop and implement patient pathways and	Patient pathways and patient programs for at least	2	Partially, meetings with CPAM but no active working	The development of patient	Discussions with health	Need to develop common structure for of patient pathways to

case management systems for 1 or 2 chronic diseases	2 disease groups, available (Y/N)		group, work on patient pathways planned for Q3, Case management unlikely	pathways is delayed. Inclusion of case management unlikely for PDSA 2	insurance started,	include preventive and curative care.
Strengthen secondary, and tertiary prevention programs for 1 or 2 chronic diseases	prevention actions for each patient program, available (Y/N)	3	Target Q3 , currently GIP MSS programs are under review in the context of Prescri'mouv	No deviation		
develop communication and marketing strategies to increase patient subscription to preventive care programs	communication material, available (Y/N)	2	Target Q4: GIP MSS website development ongoing,	No deviation		
develop and implement programs for strengthening patient self-management programs	training course and coaching program for patient self-management, available (Y/N)	2	Target Q4 – not started yet, possibly collaboration with UGECAM	No deviation		
integrate and share innovations	At least two meetings/conferences organised to share Strasbourg Integrated Care experience (Y/N)	2	Target Q4: Sport Santé meeting planned, possible presentation for ICIC 2023	No deviation		

LCF6	Develop an economic model to sustain population based integrated care by evaluating the efficiency of health care delivery and re-invest generated savings in patient empowerment and preventive services.					
Activity	**KPI**	**Target value (from PLAN)**	**Actual value (from DO)**	**Reasons for the deviations**	**Mitigation actions implemented**	**Impact of mitigation actions**

Identify current funding mechanisms for integrated care and its elements	List of support initiatives and funding sources, available (Y/N)	list	completed	No deviation		
Describe and analyse economic benefits of integrated care within the defined implementation area.	Report available (Y/N)¸report published (Y/N)	presentation	Targeted for Q4 22, initial study done on analysing health and economic benefits of SSS0	No deviation		
Develop a business plan for a Strasbourg district based integrated care model	business plan for district/Strasbourg integrated care unit, available (Y/N)	1	Targeted for Q4 2022	No deviation		

Act

Cycle number (1 or 2)	**1**		
LCF1	In-depth analysis of the existing situation to fully understand the field network		
Activity	**Maintain**	**Adapt**	**Abandon**
Include the OptiMedis approach in the local strategy (CLS)	Completed		
Validate a CLS action sheet	Follow until signature		
List all health professionals in the 3 selected districts	completed		
List all Adapted physical activity unit partners	completed		
The sport and health prescription pathway from A to Z (data, information system, patients, doctors, other health professionals)		Integrate into development of patient pathways	
Analysis of the patient database of each MUS and each district (list of routine and preventive activities)			Not enough collaboration with doctors
Identify key partners and barriers		Focus on currently successful partnerships for preventive care, CPAM, ARS	
map local, regional, national, and international experience and support mechanisms for the planned initiatives	continue		

LCF2	Creating the network and developing the elements for a successful proof of concept		
Activity	**Main-tain**	**Adapt**	**Aban-don**
Launching a call for external service provider to lead workshops on the needs of the MUS/districts/ healthcare professionals		work with existing preventive care providers and enlarge service offer Integrate innovations and	
Launching a human resource hiring for the prevention and care pathway component		Work with existing resources from selected city districts and share experience	
Launching a call for external service provider on IS (shared patient file) and data (access to SNDS data)		Access SNDS to improve the economic model (LCF 6)	-

LCF3	Co-construct the core features for a proof of concept for an integrated care system		
Activity	**Main-tain**	**Adapt**	**Aban-don**
identify potential efficiency gaps for the prevention and management of 1 or 2 chronic disease		Focus on preventive care networks and develop coordinated service offer. Mobilise city district resources and share innovations, improve service coverage for people living with ALD	
Develop an analytic model to show population-based effects of integrated people centred health services using the Triple Aims of the Value Based Care (VBC) framework and define indicators		Move under LCF 6 and evaluate health care consumption for people participating in preventive care services	

LCF4	Support the implementation of a shared patient information system among healthcare professionals in the 3 districts		
Activity	**Main-tain**	**Adapt**	**Aban-don**
agree on the core characteristics for shared patient information at the district level and review currently used systems		Focus on preventive care, improve GIP MSS data base and link with health care consumption data, improve reporting with prescribing physicians as part of a marketing strategy, check for opportunities with newly created CPTS Strasbourg Ville	
IT integration following national e-health strategy (ségur numérique, ma santé2022)		Explore data sharing along patient pathways to be developed. Explore options with “mon éspace santé”	

LCF5	Develop and monitor patient centred health programs at the interface between prevention, outpatient and Inpatient care for different risk strata and strengthen patient self-management

Activity	Main-tain	Adapt	Aban-don
conduct a population segmentation exercise by disease group and identify needs for each population strata for 1 or 2 chronic diseases		To be related to the development of patient pathways and the new prescri'mouv and SSSO approach	
develop and implement patient pathways and case management systems for 1 or 2 chronic diseases		Further development of case management unlikely in the remaining time	
Strengthen secondary, and tertiary prevention programs for 1 or 2 chronic diseases	**continue**		
develop communication and marketing strategies to increase patient subscription to preventive care programs	**continue**		
develop and implement programs for strengthening patient self-management programs			
integrate and share innovations		Focus on preventive care innovations	

Lcf6	Develop an economic model to sustain population based integrated care by evaluating the efficiency of health care delivery and re-invest generated savings in patient empowerment and preventive services		
Activity	**Main-tain**	**Adapt**	**Abandon**
Identify current funding mechanisms for integrated care and its elements	**continue**		
Describe and analyse economic benefits of integrated care within the defined implementation area.		Continue and enlarge activities developed in PDSA 1	
Develop a business plan for a Strasbourg district based integrated care model			Abandon – time period too short to develop the full model,

QUESTIONS	ANSWERS
Any new proposed action for the future?	- Refocus on preventive care - Enlarge preventive care services offer and include innovations - Increased coverage of chronic care patients living in selected city districts with preventive care services

QUESTIONS	ANSWERS
Any new proposed action for the future?	**-**

2nd PDSA Cycle

Plan

LCF1	In-depth analysis of the existing situation to fully understand the field network							
Activities (from the LAP)	**Actions**	**Actors**	**Timeline**	**KPIs MEASURE**				
				KPIs (from the LAP)	Who will collect the data?	When will the data be collected?	How will the data be collected?	Target value
Validate a CLS action sheet	•	• Institutional • Ville de Strasbourg • ARS	• Q3 2022	Signed CLS	• GiP-MSS	• 1-23	•	• yes
The sport and health prescription pathway from A to Z (data, information system, patients, doctors, other health professionals)	•	• GIP MSS • OptiMedis • existing professional networks	• Q4 2022	2 patient pathways	• GIP MSS	• 1-23	•	2 pathways
Map regional, national, and international experience and support mechanisms for the planned initiatives	•	• network partners • OptiMedis • GIP MSS • LGP working group	• ongoing	Updated list of Literature or good practices, websites	GIP MSS, OM	12 -22	Literature list	available
LCF 2	Creating the network and developing the elements for a successful proof of concept							

Activities (from the LAP)	Actions	Actors	Timeline	KPIs MEASURE				
				KPIs (from the LAP)	Who will collect the data?	When will the data be collected?	How will the data be collected?	Target value
Mobilise community actors to increase and diversify service offer	• Action 1	• OptiMedis • EUSTRAS • GIP MSS • community reps	• Q4 2022	Exchange platform for community actors in place Health ambassador program in place Increase percentage of prescriptions taken up by patients Creation of mobile health educator to improve access to preventive care in 3 city quarters	• GIP MSS	1-23	Report	Available 30% of prescribtions are honored]
Mobilise prescribing physicians	• [2….]	• OptiMedis • EUSTRAS • GIP MSS • network physicians (URPS, MUS, CPTS)	• Q4 2022	Improved reporting and feedback mechanisms for GPs increased number of SSSO prescriptions (trend by doctor, by city quarter)	GIP MSS	1-23	• report	available increase by 20%
Promote SSSO integration in physician networks (MUS, CPTS)	• […3.]	• OptiMedis • EUSTRAS • GIP MSS • GPs and networks	• Q4 2022	SSSO integrated in CPTS Strasbourg Ville targets City quarter GPs mobilised around new prescri'mouv standards	GIP MSS	1-23	interview	Available applied
LCF3	**Co-construct the core features for a proof of concept for an integrated care system**							

Activities (from the LAP)	Actions	Actors	Timeline	KPIs MEASURE				
				KPIs (from the LAP)	Who will collect the data?	When will the data be collected?	How will the data be collected	Target value
Broaden the scope of GIP MSS (coordinated) service offer	•	• health education specialists, • city quarter network participants • Patient reps • OptiMedis • EUSTRAS	• Q3 2022	No of participants of: • training course and coaching program for patient self-management, • differentiate program based on segmentation of target population • healthy nutrition programs • psychosocial health activities	GIP MSS	1-23	reports interviews	at least 2 new programs
integrate and share innovations	•	• city quarter participants • OptiMedis • EUSTRAS • GIP MSS	• Q4 2022	Contribution to • Assises sport santé Strasbourg • JADECARE stakeholder meeting • ICIC meeting 2023	GIP MSS, OptiMedis	1-23	count	At least 3 contributions
Improve coverage of people living with or at risk of chronic disease	•	• health education specialists, • city quarter network participants	• Q4 2022	• 40% of people living with selected ALD in the implementation area receive preventive care messages	GIP MSS OptiMedis	1-23	SSSO stats	40%

		• Patient reps • OptiMedis • EUSTRAS		• 15% of selected patients subscribe to GIP MSS activities				15%
LCF4	Support the implementation of a shared patient information system among healthcare professionals in the 3 districts							
Activities (from the LAP)	**Actions**	**Actors**	**Timeline**	KPIs (from the LAP)	Who will collect the data?	When will the data be collected?	How will the data be collected?	Target value
Develop and implement new GIP MSS database, including national standards	•	• GIP MSS • OptiMedis • EUSTRAS	• Q3 2022	• ligo database established •	• GIP MSS	• 1-23	•	available
Use data analytic reports to promote SSSO	• [….]	• GIP MSS • OptiMedis • EUSTRAS • patient reps • health professionals	• Q4 2022	• analytic format for stakeholder communication developed • analytic population-based report presented	• GIP MSS • OptiMedis	• 12-22	Information material	Available availabel
Explore information sharing options along patient pathways	•	• GIP MSS • OptiMedis • EUSTRAS • health professionals • hospital reps • Pulsy?	• Q4 2022	• concept for data sharing instrument for patient pathways developed, • appropriate tool selected (if applicable)	GIP MSS OptiMedis	1-23	document	Available
LCF5	**Develop and monitor patient centred health programs at the interface between prevention, outpatient and Inpatient care for different risk strata and strengthen patient self-management**							

Activities (from the LAP)	Actions	Actors	Timeline	KPIs (from the LAP)	Who will collect the data?	When will the data be collected?	How will the data be collected?	Target value
develop structure of integrated patient pathways/ parcours santé	[…1.]	OptiMedis EUSTRAS GIP MSS health professionals hospital based NCD experts,	Q3 2022	The general structure patient pathways is drafted and discussed with key stakeholders	OptiMedis, GIP MSS	1-23	Validation report	available
Strengthen secondary, and tertiary prevention programs	[…2.]	GIP-MS and Associations OptiMedis EUSTRAS health professionals hospital based NCD experts, patient reps	Q4 2022	2 health pathways and associated preventive care activities developed	GIP MSS	1-23	documents	2 docs
develop communication and marketing strategies to increase prescriptions numbers and patient interest in preventive care programs	• 3	• marketing experts • GPs • GIP-MSS • OptiMedis • EUSTRAS	• Q3 2022	communication material, available (Y/N), number if new subscribers by city quarter web site and social media channels for GIP MSS created; user monitoring	GIP MSS	1 -23	•	available
LCF6	Develop an economic model to sustain population based integrated care by evaluating the efficiency of health care delivery and reinvest generated savings in patient empowerment and preventive services.							
Activities (from the LAP)		**Actors**	**Timeline**					

	Actions			KPIs (from the LAP)	Who will collect the data?	When will the data be collected?	How will the data be collected?	Target value
Extend the economic model used in PDSA 1 to show health effects on preventive care in chronic disease patients	• Action 1	• GIP MSS • OptiMedis • EUSTRAS • CPAM • ARS	• Q3 2022	-more advanced analytic model - Calculate potential savings for the intervention area (combined effects of preventive care and increased quality of care	[CPAM, GIP MSS data]	1-23	Reports, presentations	available
Use SNDS data to identify quality improvement potentials and effects …	• [2]	• health analysts • epidemiologists and survey staff • health professionals • CPAM and ARS • OptiMedis • EUSTRAS	• Q4 2022	• patient segmentation by risk and cost • follow patient pathways • define systems performance analysis tools and do at least one analysis	• GIP-MSS • OptiMedis	• 1-23	Access permissions	available
Identify current funding mechanisms for integrated care and its elements	•	• OM and EUSTRAS • ARS, CPAM • EU tenders • cross-border collaborations	• Q4	• list of opportunities	• OM • GIP MSS • EUSTRAS	1-23	Grant application	>1

Develop a health data observatory with CPAM	• [3….]	• [EUSTRAS • OM • CPAM • GIP MSS….]	• [Q3 2022….]	• at least one analysis of trends in ambulatory chronic care for the intervention region	• CPAM, • GIP-MSS • OptiMedis	• 1-23	• presentation	available

Do

Local Action Plan: Implement oGP population based integrated care in 3 city quarters PDSA 2		
LCF 1	In-depth analysis of the existing situation to fully understand the field network	
Activity	**KPI**	**Actual value**
Validate a CLS action sheet	• Signed CLS	CLS not yet signed
The sport and health prescription pathway from A to Z (data, information system, patients, doctors, other health professionals)	• 2 patient pathways	Prescri'mouv and SSSO updated, targeted pathways for heart failure and diabetes, format not yet specified, planned for 1 QT 2023
regional, national, and international experience and support mechanisms for the planned initiatives	Updated list of Literature or good practices, websites	Ongoing

LCF 2	Creating the network and developing the elements for a successful proof of concept	
Activity	**KPI**	**Actual value**
Mobilise community actors to increase and diversify service offer	• Exchange platform for community actors in place • Health ambassador program in place • Increase percentage of prescriptions taken up by patients	Assessment of medico-social and community activites by city quarter ongoing Health ambassador project conceptualised but depends on CLS funding. Additional mobile health educator established to increase preventive care offer in city quarters Not started, follow up of patients with prescriptions planned through mediators/health ambassador program
Mobilise prescribing physicians	• Improved reporting and feedback mechanisms for GPs • increased number of SSSO prescriptions (trend by doctor, by city quarter)	Ongoing, new database set up ongoing
Promote SSSO integration in physician networks (MUS, CPTS)	• SSSO integrated in CPTS Strasbourg Ville targets • City quarter GPs mobilised around new prescri'mouv standards	Done – CPTS Strasbourg Ville is still in its early setup phase ongoing

LCF 3	Co-construct the core features for a proof of concept for an integrated care system	
Activity	**KPI**	**Actual value**
Broaden the scope of GIP MSS (coordinated) service offer	No of participants of: • training course and coaching program for patient self-management,	Not started

	• differentiate program based on segmentation of target population • healthy nutrition programs • psychosocial health activities	Patient segmentation for SSSO programs, according to their level of autonomy to engage in SSSO programs New SSSO approaches under development
integrate and share innovations	Contribution to • Assise sport santé Strasbourg • JADECARE stakeholder meeting • ICIC meeting 2023	Done - Several contributions prepared for national and international working groups and conferences
Improve coverage of people living with or at risk of chronic disease	• 40% of people living with selected ALD in the implementation area receive preventive care messages • 15% of selected patients subscribe to GIP MSS activities	Ongoing, website and social media channels active Not yet regularly assessed

LCF4	Support the implementation of a shared patient information system among healthcare professionals in the 3 districts	
Activity	**KPI**	**Actual value**
Develop and implement new GIP MSS database, including national standards	• ligo database established	available
Use data analytic reports to promote SSSO	• analytic format for stakeholder communication developed • analytic population-based report presented	Ongoing Initial report done, but only based on small subpopulations
Explore information sharing options along patient pathways	• concept for data sharing instrument for patient pathways developed, • appropriate tool selected (if applicable)	Tools proposed (Pulsy-parceo) but little application, specific and integrated patient pathways not yet developed

LCF5	Develop and monitor patient centred health programs at the interface between prevention, outpatient and Inpatient care for different risk strata and strengthen patient self-management	
Activity	**KPI**	**Actual value**
develop structure of integrated patient pathways/ parcours santé	• The general structure patient pathways is drafted and discussed with key stakeholders	Ongoing, resource material collected
Strengthen secondary, and tertiary prevention programs	• 2 health pathways and associated preventive	Not yet started

	care activities developed	
develop communication and marketing strategies to increase prescriptions numbers and patient interest in preventive care programs	• communication material, available (Y/N), number if new subscribers by city quarter • web site and social media channels for GIP MSS created; user monitoring	Not started GIP SSSO available https://www.maisonsportsantes-trasbourg.fr/ social media channels active

LCF6	Develop an economic model to sustain population based integrated care by evaluating the efficiency of health care delivery and re-invest generated savings in patient empowerment and preventive services.	
Activity	**KPI**	**Actual value**
Extend the economic model used in PDSA 1 to show health effects on preventive care in chronic disease patients	• more advanced analytic model • Calculate potential savings for the intervention area (combined effects of preventive care and increased quality of care	Ongoing, demand for database access (SNDS) under development, initial survey for cost benefit of SSSO programs done. Increase of case numbers and better data needed.
Use SNDS data to identify quality improvement potentials and effects …	• patient segmentation by risk and cost • follow patient pathways • define systems performance analysis tools and do at least one analysis	Patient pathway development ongoing – see above. patient segmentation based on level of autonomy to engage in physical activity programs (see above)
Identify current funding mechanisms for integrated care and its elements	• list of opportunities	ongoing

QUESTIONS	**ANSWERS**
What was actually implemented? Any deviation from the planned actions	Situation analysis done in PDSA 1; key developments are in: • development of analytic models for health benefits and cost benefits through SSSO • first steps to increase coverage of preventive care measures for chronic care patients • slow development for integrated care pathways • development of accompanying care services (health ambassadors, mediators). • integration of preventive care in care networks (CPTS Strasbourg centre) • access to data limited • new approaches in SSSO • slow development for shared patient data,

Problems? Unexpected findings? Please describe	Implementation plan too ambitious for the available time frame, collaboration with physician networks slow, analytic work, particularly in terms of systems performance evaluation is interesting. The local health contract (CLS), which includes some of the funding for the program, and was planned to be signed early 2022 has not been signed until now. However, political situation favours territorial orientation of primary and integrated care. The JADECARE program is embedded in a larger programme (TSD) for, which will ascertain continuity for the next years. The current political framework is quite conducive to the sustainability of JADECARE content in Strasbourg and France as a whole.

IMPLEMENTATION PROGRESS OF THE LOCAL GOOD PRACTICE			
0-25%	**25-50%**	**50-75%**	**75-100%**
		X	

Study

Cycle number		**PDSA 2**				
LCF1		In-depth analysis of the existing situation to fully understand the field network				
Activity	**KPI**	**Target value (from PLAN)**	**Actual value (from DO)**	**Reasons for the deviations**	**Mitigation actions implemented**	**Impact of mitigation actions**
Validate a CLS action sheet	Signed CLS	available	CLS not yet signed	Bureaucratic process slow, more time needed	none	
The sport and health prescription pathway from A to Z (data, information system, patients, doctors, other health professionals	2 patient pathways	2 patient pathways	Prescri'mouv and SSSO updated, targeted pathways for heart failure and diabetes, format not yet specified, planned for 1 QT 2023	No formal process available for pathway design	Pathway design and validation process planned for 1 QT 2023	
regional, national, and international experience and support mechanisms for the planned initiatives	Updated list of Literature or good practices, websites	Literature list, websites	Ongoing	Ongoing process		

LCF2		Creating the network and developing the elements for a successful proof of concept				
Activity	**KPI**	**Target value (from PLAN)**	**Actual value (from DO)**	**Reasons for the deviations**	**Mitigation actions implemented**	**Impact of mitigation actions**
Mobilise community actors to increase and diversify service offer	Exchange platform for community actors in place Health ambassador program in place	Available Available	Assessment of medico-social and community activities by city quarter ongoing	Limited time	None planned	

	Increase percentage of prescriptions taken up by patients	30% prescriptions are honoured	Health ambassador project conceptualised but depends on CLS funding. Not started, follow up of patients with prescriptions planned through mediators/health ambassador program	CLS funding delayed Ongoing, issues of confidentiality of patient data	No special measures Consultations with prescribing physicians	
Mobilise prescribing physicians	Improved reporting and feedback mechanisms for GPs increased number of SSSO prescriptions (trend by doctor, by city quarter)	Available No of prescriptions increase by 20 %	Ongoing, new database set up ongoing	Limited time Limited time	Staff time increase planned	
Promote SSSO integration in physician networks (MUS, CPTS)	SSSO integrated in CPTS Strasbourg Ville targets City quarter GPs mobilised around new prescri'mouv standards	Available applied	Done – CPTS Strasbourg Ville is still in its early setup phase ongoing	CPTS Strasbourg ville still under development Limited time		

LCF 3		Co-construct the core features for a proof of concept for an integrated care system				
Activity	**KPI**	**Target value (from PLAN)**	**Actual value (from DO)**	**Reasons for the deviations**	**Mitigation actions implemented**	**Impact of mitigation actions**
Broaden the scope of GIP	No of participants of: • training course and coaching	At least two new	Not started	Funding constraints, CLS not started yet.		

MSS (coordinated) service offer	program for patient self-management, • differentiate program based on segmentation of target population • healthy nutrition programs • psychosocial health activities etc	programs	Patient segmentation for SSSO programs, according to their level of autonomy to engage in SSSO programs New SSSO approaches under development	New prescri'mouv and SSSO programs developed and early operational stage		
integrate and share innovations	Contribution to • Assise sport santé Strasbourg • JADECARE stakeholder meeting ICIC meeting 2023	At least 3 contributions	Done - Several contributions prepared for national and international working groups and conferences	Done and to be continued		
Improve coverage of people living with or at risk of chronic disease	• 40% of people living with selected ALD in the implementation area receive preventive care messages • 15% of selected patients subscribe to GIP MSS activities	40% 15%	Ongoing, website and social media channels active Not yet regularly assessed	Stage to early to evaluate. Data availability still limited (2019 - 2021 CPAM data available), setting up "observatory" at CPAM planned		

LCF4	Support the implementation of a shared patient information system among healthcare professionals in the 3 districts

Activity	KPI	Target value (from PLAN)	Actual value (from DO)	Reasons for the deviations	Mitigation actions implemented	Impact of mitigation actions
Develop and implement new GIP MSS database, including national standards	ligo database established	available	available	none		
Use data analytic reports to promote SSSO	analytic format for stakeholder communication developed analytic population-based report presented	Available available	Ongoing Initial report done, but only based on small subpopulations	None – activity continues, but case numbers and data access need to be stabilised		
Explore information sharing options along patient pathways	concept for data sharing instrument for patient pathways developed, appropriate tool selected (if applicable)	available	Tools proposed (Pulsy-parceo) but little application, specific and integrated patient pathways not yet developed	Still weak collaboration with physician networks – but improvement visible		

LCF5		Develop and monitor patient centred health programs at the interface between prevention, outpatient and Inpatient care for different risk strata and strengthen patient self-management				
Activity	**KPI**	**Target value (from PLAN)**	**Actual value (from DO)**	**Reasons for the deviations**	**Mitigation actions implemented**	**Impact of mitigation actions**
develop structure of integrated patient pathways/ parcours santé	The general structure patient pathways is drafted and discussed with key stakeholders	available	Ongoing, resource material collected	Limited time		

Strengthen secondary, and tertiary prevention programs	2 health pathways and associated preventive care activities developed	available	Not yet started	No formal pathway structures yet available	Development and approval planned for 1 QT 2023	
develop communication and marketing strategies to increase prescriptions numbers and patient interest in preventive care programs	communication material, available (Y/N), number if new subscribers by city quarter web site and social media channels for GIP MSS created; user monitoring	Available available	Not started GIP SSSO available https://www.maisonsportsantestrasbourg.fr/ social media channels active	Website and social media channels available but user monitoring needs to be developed marketing strategy needs development,		

LCF6		Develop an economic model to sustain population based integrated care by evaluating the efficiency of health care delivery and re-invest generated savings in patient empowerment and preventive services				
Activity	**KPI**	**Target value (from PLAN)**	**Actual value (from DO)**	**Reasons for the deviations**	**Mitigation actions implemented**	**Impact of mitigation actions**
Extend the economic model used in PDSA 1 to show health effects on preventive care in chronic disease patients	more advanced analytic model Calculate potential savings for the intervention area (combined effects of preventive care and increased quality of care	Available available	Ongoing, demand for database access (SNDS) under development, initial survey for cost benefit of SSSO programs done. Increase of case numbers and better data needed.	Access to anonymised individual data missing Low user numbers	Application under way, submission planned for Jan 2023 SSSO programs updated and diversified – marketing strategy planned	
Use SNDS data to identify quality improvement potentials and effects …	patient segmentation by risk and cost follow patient pathways define	Available	Patient pathway development ongoing – see above. patient segmentation based on level of autonomy to engage in physical	Patient pathway format not yet available SNDS data	Both to be developed in 1 QT 2023 (see above)	

	systems performance analysis tools and do at least one analysis	1 performance analysis	activity programs (see above)	base not yet accessible		
Identify current funding mechanisms for integrated care and its elements	list of opportunities	available	ongoing	none		

Act

Local Action Plan: Implement oGP population based integrated care in 3 city quarters PDSA 2			
LCF 1	In-depth analysis of the existing situation to fully understand the field network		
Activity	**Maintain**	**Adapt**	**Abandon**
Validate a CLS action sheet	yes		
The sport and health prescription pathway from A to Z (data, information system, patients, doctors, other health professionals)	yes		
regional, national, and international experience and support mechanisms for the planned initiatives	yes		
LCF 2	Creating the network and developing the elements for a successful proof of concept		
Activity	**Maintain**	**Adapt**	**Abandon**
Mobilise community actors to increase and diversify service offer	yes		
Mobilise prescribing physicians	yes		
Promote SSSO integration in physician networks (MUS, CPTS)	yes		

LCF3	Co-construct the core features for a proof of concept for an integrated care system		
Activity	**Maintain**	**Adapt**	**Abandon**
Broaden the scope of GIP MSS (coordinated) service offer	yes		
integrate and share innovations	yes		
Improve coverage of people living with or at risk of chronic disease	yes		

LCF4	Support the implementation of a shared patient information system among healthcare professionals in the 3 districts		
Activity	**Maintain**	**Adapt**	**Abandon**
Develop and implement new GIP MSS database, including national standards	done		
Use data analytic reports to promote SSSO	yes		
Explore information sharing options along patient pathways	yes		

LCF5	Develop and monitor patient centred health programs at the interface between prevention, outpatient and Inpatient care for different risk strata and strengthen patient self-management		
Activity	**Maintain**	**Adapt**	**Abandon**
develop structure of integrated patient pathways/ parcours santé	yes		
Strengthen secondary, and tertiary prevention programs	yes		
develop communication and marketing strategies to increase prescriptions numbers and patient interest in preventive care programs	yes		

LCF6	Develop an economic model to sustain population based integrated care by evaluating the efficiency of health care delivery and re-invest generated savings in patient empowerment and preventive services.		
Activity	**Maintain**	**Adapt**	**Abandon**
Extend the economic model used in PDSA 1 to show health effects on preventive care in chronic disease patients	yes		
Use SNDS data to identify quality improvement potentials and effects …	yes		
Identify current funding mechanisms for integrated care and its elements	yes		

QUESTIONS	ANSWERS
Any new proposed action for the future?	-

Post-implementation

ITEM	ANSWER
Title and Abstract	
Title	**Implement population based integrated care in 3 city quarters of Strasbourg**
Abstract	Strasbourg has a rich portfolio of initiatives and projects targeting innovations in health care delivery, such as care coordination in multi-professional teams, prevention and physical activity initiatives, medico-social services, and digitisation in health. This is backed-up by national and regional health strategies. The local good practice (LGP) focuses on transforming a disease based professionally dominated care system towards a territorial population-based, people centred health system in an urban environment in three Strasbourg districts. Its main pillars are: • to build strong stakeholder networks between physician networks, preventive care facilities and the Strasbourg based Sports on prescription program. • to develop integrated health programs and patient pathways towards a continuity of care approach. • to foster patient activation and participation towards better patient health and self-management. • to share patient information along patient pathways. • to build data-based decision support including patient information sharing across provider networks, • to increase efficiency of health care delivery system through performance measurement, analytical tools for outcome and impact assessment.
Why did you start?	**Answer**
Problem description	Aging populations, an increasing prevalence of chronic diseases, lack of health care staff and rising health care costs are dominant health care problems not only in France. Coordinated and integrated health care delivery systems have been identified in France as a possible solution. The City of Strasbourg started to finance preventive care solutions including sports on prescription some 10 years ago using the instrument of a “local health contract” to fund these activities. These solutions developed well over the years and have covered some 4000 patients until 2022. However, the initiative was not well connected with the coordinated multiprofessional health care approaches recommended by the French MoH - such as the urban health houses (MUS: maision urbaine de santé) and territorial multiprofessional teams (CPTS: communautés professionnelles territoriales de santé). Additionally, the added value of the initiative for population and patient health remained unclear. The city of Strasbourg has committed itself to test an integrated care approach following the example of the OptiMedis model in Strasbourg city quarters with the aim to better coordinate its health-related activities in selected city quarters, and to measure its impact and patient health and wellbeing.
Available knowledge	- Prévention et Santé Publique; Dossier coordonné par Roger Salamon, Pierre Lombrail et Patrick Peretti-Watel https://www.hcsp.fr/explore.cgi/Adsp?clef=133 - L’état de santé dans les territoires du Grand Est, ORS Grand Est Mars 2018 ORS Grand Est | Actualités (ors-ge.org) - - ARS Grand Est Etude territoriale Eurométropole 2016; https://www.grand-est.ars.sante.fr/sites/default/files/2017-04/ARS_GrandEst_Etude_territoire_Eurom%C3%A9tropole_2016.pdf - Cost-effectiveness of exercise referral schemes: a systematic review of health economic studiess, Amber Werbrouck et al, European Journal of Public Health, Vol. 32, No. 1, 87–94, 2021

<table>
<tr><td></td><td>
- Portrait du Grand-EST, ORS Grand Est https://www.grand-est.ars.sante.fr/index.php/system/files/2019-10/Synthese_regionale_EPCI_2019.pdf
- Le Projet Régional de Santé, ARS Grand Est https://www.grand-est.ars.sante.fr/prs
- report EU CHRODIS+ project CHRODIS - Joint Action on Chronic Diseases
</td></tr>
<tr><td>Rationale</td><td>The French health system traditionally follows a strong sectoral organisation. Primary care is mostly based on a single practice model with little or no collaboration with other sectors, particularly not with preventive and social care. A major policy shift happened with a move towards a de-concentration of services, the creation of regional health agencies (agence regional de santé, ARS), the creation of coordinated service approaches and a move towards population health. The promotion of territorial multiprofessional teams (CPTS, see above) is thought to improve service coordination and effectiveness of services. Additionally, the city of Strasbourg has engaged in a variety of preventive care measures including the support of sports on prescription (sport santé sur ordonnance, SSsO). Additionally, the “Eurométropole de Strasbourg” won a national competition for innovations in health, which funds the project health territories of tomorrow (Territoire de santé de demain, TSD), which will continue also after the end of JADECARE. This setting provides for a positive project environment, where the JADECARE interventions can create appropriate and sustainable solutions.</td></tr>
<tr><td>Specific aims</td><td>Develop a population based local integrated care system in three districts of Strasbourg based on the OptiMedis model and the Quadruple AIM to the local specificities of the Strasbourg Community</td></tr>
<tr><td>What did you do?</td><td>Answer</td></tr>
<tr><td>Context</td><td>
Identified needs for Strasbourg from scope definition:

Create evidence for improved population health and patient well-being through integrated, performant and cost-effective care (preventive and disease management) interventions.
Situation analysis and definition of improvement opportunities
Implement data sharing tools (depending on national and regional IT strategies in health and their implementation plan)
Develop patient activation strategy and design interventions.
Continuously monitor outcomes and impact of interventions
Identification of disease management priorities and implement integrated patient centred care plans.

Results from SWOT
<table>
<tr><th>Strengths</th><th>Weakness</th></tr>
<tr><td>8. National strategy “Ma Santé 2022”
9. Local ambitious project managed by EUSTRAS : “Territoires de santé de demain”
10. Established partnership with the local health insurance agency (CPAM)
11. Established partnership with the local health agency (ARS)</td><td>7. Unbuild field networks
8. Grouped health data access only.
9. PoC not based on a local integrator.
10. 3 separated districts selected for the experiment
11. Human resources</td></tr>
</table>
</td></tr>
</table>

		12. Establishes partnership with university 13. Competent authority / represent the French ministry of health 14.	12. Local is Strasbourg, and might be far from the ministry
		Opportunities	Threats
		7. Political support 8. Large local consortium 9. IT regional platform for health data 10. A community of innovators that could experiment their solutions 11. Create a new actor/structure in the local health ecosystem 12. COVID-19 crisis has triggered new organisations/way of working, usage etc	8. More of a political decision on the first place than from the field (top – down) 9. Ability to develop a motivated network on the field 10. Ability to communicate / disseminate on the project and method 11. Onboard patients from districts with precarity and cultural specificities 12. Create a new actor/structure 13. Data sharing was refused at a national level with the Health Data Hub 14. Health professional fatigue after COVID-19 crisis
Intervention(s)	EUSTRAS (France) works with a team of sports educators, the local health insurance company and multi-professional health teams to foster the engagement of chronic disease patients in physical activity programs and measures the effects on the consumption of health services. Patient support beyond primary care is extended through a health ambassador program, health mediators and integration of complementary city quarter activities. The results were presented locally (Assises Sport Santé Strasbourg) and internationally (ICIC conference 2022 in Odense, Denmark). Data based management is strengthened by accessing complementary data from national databases. Major results are: • Local health contract (contrat local de santé. CLS) and implementation of key elements for the integrated care models in 3 city districts (CLS signing delayed) • Review and adaption of sport and health program on prescription (SSSO and prescri'mouv). New data base set up to permit better analytics for impact of secondary and tertiary prevention activities. • Creation of mobile health educator to improve access to preventive care in project city quarters.		

	• Strong collaboration with health insurance (CPAM) and SSSO to analyse impact preventive care on health care consumption. Results presented internationally (ICIC 2022) and nationally (Assises Sport Santé). • Joint research project discussed with GIP MSS scientific committee. The EUSTRAS team of stakeholders involved at various stages of the program is quite large. Key actors are: • director for economic development at EUSTRAS: Rémy Banuls remy.banuls@strasbourg.eu • project director TSD: Fanny Loux: fanny.loux@strasbourg.eu • director GIP MSS de Strasbourg: Francois Jouan francois.jouan@strasbourg.eu • Réferente médicale GIP MSS: Corinne Bildstein corinne.bildstein@strasbourg.eu • Chargé de projet -développement intercommunal Sport Santé: Marlon Schrodi marlon.schrodi@strasbourg.eu • responsible de service CPAM: Catherine Geiger catherine.geiger@assurance-maladie.fr • Responsible Ségur Numérique pour la region Grand Est, ARS: Bruno Boutteau Bruno.boutteau@ars.santé.fr • Economiste de santé CPAM Bas Rhin: Colin Majean colin.majean@assurance-maladie.fr
Study of the Intervention(s)	Impact assessment is based on the delivery of identified products, availability of communication channels, results of operations research, analysis of routine data, stakeholder discussions etc. Some key products are: - integrated care integration into Local health contract CLS - Interface for patient communication: patient information material and GIP MSS website - situation analysis within 3 city districts based on routine data - development of patient pathways - study on patient performance improvement based on GIP-MSS data - increase offer of secondary and tertiary prevention for chronic care patients - broaden the scope of preventive care services for NCD patients living in the identified city districts. - number of prescriptions following stakeholder sensitization A study matching Sports on prescription data with health insurance data showed that patients participating in SSSO have a lower consumption of health care services following the recruitment in the programs compared to non-participating population with similar characteristics. Data of participants of SSSO activities show increase in physical performance. SSSO prescription rates increase following intensive sensitisation of prescribing doctors.
Measures	**LCF 1:** - Signed CLS, - 2 patient pathways, - updated list of literature or good practices, - websites **LCF 2**: - exchange platform for community actors in place, - health ambassador program in place, - increase percentage of prescriptions taken up by patients - Creation of mobile health educator to improve access to preventive care in 3 city quarters,

	- Improved reporting and feedback mechanisms for GPs - increased number of SSSO prescriptions (trend by doctor, by city quarter) - SSSO integrated in CPTS Strasbourg Ville targets - City quarter GPs mobilised around new prescri'mouv standards **LCF 3** No of participants of: • training course and coaching program for patient self-management, • differentiate program based on segmentation of target population • healthy nutrition programs • psychosocial health activities Contribution to • Assises sport santé Strasbourg • JADECARE stakeholder meeting • ICIC meeting 2023 40% of people living with selected ALD in the implementation area receive preventive care messages 15% of selected patients subscribe to GIP MSS activities. **LCF 4** • ligo database established • analytic format for stakeholder communication developed. • analytic population-based report presented concept for data sharing instrument for patient pathways developed, • appropriate tool selected (if applicable) **LCF 5** • The general structure patient pathways is drafted and discussed with key stakeholders • 2 health pathways and associated preventive care activities developed. • communication material, available (Y/N), number if new subscribers by city quarter • web site and social media channels for GIP MSS created; user monitoring **LCF 6:** • more advanced analytic model • Calculate potential savings for the intervention area (combined effects of preventive care and increased quality of care • patient segmentation by risk and cost • follow patient pathways • define systems performance analysis tools and do at least one analysis • list of opportunities • at least one analysis of trends in ambulatory chronic care for the intervention region
Analysis	**Qualitative and quantitative data** • Compare KPIs with implementation status, • Assess and quantify anticipated outputs, • Study data: demographic, health insurance, hospital data, sports on prescription data • stakeholder meetings • discuss findings at national and international workshops. **Understanding variations:** • Stakeholder meetings: Multiple delays happened in funding, recruiting staff, signing agreements (e.g., CLS Strasbourg), availability of experts, varying stakeholder interest. • analysing health data from different sources. • reviewing implementation processes: various conditionalities in the development of instruments (e.g., data access, pathway development, collaboration with physicians), collaboration arrangements
What did you find?	**Answer**

Results	**What was implemented:** Situation analysis done in PDSA 1; key developments are in: • development of analytic models for health benefits and cost benefits through SSSO • first steps to increase coverage of preventive care measures for chronic care patients • slow development for integrated care pathways • development of accompanying care services (health ambassadors, mediators). • integration of preventive care in care networks (CPTS Strasbourg centre) • new approaches in SSSO Network development is mostly limited to preventive care, the ARS and the insurer CPAM. All LCFs related to these groups are mostly implemented. The inclusion of health professionals particularly for ambulatory care remains difficult, probably due to missing incentive systems. LCF 1; LCF 3, LCF 5 and LCF 6 are on target. LCF 2 Is delayed due to delays in signing the CLS and LCF4 is unlikely to be implemented in time due to the current lack of collaboration with medical practices. There were many factors delaying certain planed processes, such as • bureaucratic processes in the finalisation of the CLS • lack of processes and incentives to develop patient pathways, • limited data access and ongoing issues on confidentiality for their access • long development periods for CPTS • weak collaboration with physicians and physician networks • slow development for shared patient data, • delay in the product marketing **Problems and unexpected findings:** Integrating project content into the Strasbourg 5-year health plan was delayed so that additional funding for project operations was not available in time, Collaboration with medical staff and group practices was more difficult than expected. A fruitful collaboration was established however, between GIP MSS and CPAM, the new constitution of a multi-professional health network in Strasbourg might be an opportunity. The implementation plan might have been too ambitious for the available time frame. The collaboration with physician networks was generally slow. The analytic work done, particularly in terms of systems performance evaluation is interesting. Generally, the political situation favours territorial orientation of primary and integrated care. The JADECARE program is embedded in a larger programme (TSD), which will ascertain continuity for the next years. The current political framework is quite conducive to the sustainability of JADECARE content in Strasbourg and France as a whole.
What does it mean?	**Answer**
Summary	Whereas all LGP components are relevant and answer to the national or local development strategies for integrated population-based care, the entire program was probably too ambitious for the time available. Many processes have started but are not yet finalised. There is a variety of actors in medico-social care in Strasbourg, often funded by the city of Strasbourg itself, which need further coordination and integration into a population-based approach. The use of patient data to analyse system's performance is not easy due to data protection issues. Although there are many tools for making patient data available across provider networks, in reality little is implemented overcoming the usual sectoral boundaries. The fact that the JADECARE intervention is imbedded into the larger TSD program is a big opportunity for JADECARE sustainability. The same is true for the policy framework, which favours integrated care at the primary level. Generally, there are many started but unfinished processes, which will be completed following the end of the JADECARE implementation phase. Particular strengths of the project have been amongst others:

	• Identifying and analysing routine data sources to determine patient needs and performance of preventive care interventions • starting the discussion and development of integrated patient pathways • starting to operationalise policy recommendations on integrated care in 3 city districts. • Intensifying discussions between primary care physicians and actors in preventive and medico-social care • creating additional services at the interface between primary, preventive and community care/health: mobile trainers for SSSO, community health ambassador programme, mobile health educators
Interpretation	**See also under Results.** There are multiple studies showing the effect of preventive care interventions on the health and wellbeing of people living with NCDs. WHO has formulated its "Framework on integrated people-centred health services" during the World Health assembly 2016[1] showing the need to combine health and social care, prevention and public health for better management of NCDs. Wagner's chronic care mode and its many adaptions provide an organisational framework for NCD care organisation. OptiMedis has shown the economic and health impact of population based integrated care programs in urban and rural settings. The particular value of the JADECARE exercise in Strasbourg is certainly the transformation of that evidence into local practice and the use of routine data for evaluating its effects. Proposed elements of JADECARE have entered the 5-year local health contract (CLS, contrat local de santé) of Strasbourg, signifying that population based integrated care will continue in Strasbourg after the end of its implementation phase. Elements of prevention and integrated care are part of the newly founded Strasbourg network of health professionals (CPTS) and continue to be part of TSD. COVID-19 has had its impact on JADECARE implementation pace also in Strasbourg, with the lack of physical meetings on one side and the work overload for health care and public health providers on the other. The limited interest of health care providers to engage in new collaborative forms of work and a more active exchange of patient data might also be a factor. However, the JADECARE program has shown how French national policies can be put into local practice and opened discussions on how to overcome sectoral boundaries
Limitations	Contextualisation of the oGP into local good practice is a major challenge. The OptiMedis oGP has been developed within a German context, its health insurance system and access to patient data. Health care data are not available in the same way in France, particularly for ambulatory care. The shared savings contract used by OptiMedis is based on efficiency gains and better health for a given population through. Two major advantages are incorporated in this model: The transformation of care delivery towards the "production" of health comes at no additional cost and the "local integrator" as part of the system provides the necessary incentives for change. This approach Is not easily transferrable to the French health system. However, the tools used for evaluating transformation effects are very valuable to guide the development of complementary services such as sports on prescription, patient pathways and others provided that the interventions cover a sufficiently large population. A way to overcome sectoral boundaries and also to access patient data might be the development and systematic implementation of patient pathways for chronic care patients bridging the sectoral barriers of hospital care – rehabilitation – primary care – medico-social care and community health. Works have started within the JADECARE project and will be completed in the next months. Digital support is essential for population based integrated care. There is a consistent national strategy on e-health and digitisation in health, but implementation is still fragmented. Particularly the interface between physician software and the new tools is complex. Whereas hospital networks (groupement hospitalier de territoire GHT) have established systems to share patient

[1] https://apps.who.int/gb/ebwha/pdf_files/WHA69/A69_39-en.pdf?ua=1&ua=1

	data, this is not the same within ambulatory care or between hospital and ambulatory care. More work needs to be done in this field.
Conclusions	JADECARE has certainly opened a door for sharing best practices in population based integrated care. Communication between project partners, the participation in thematic workshops and stakeholder conferences has opened new perspectives. The contextualisation of the OptiMedis oGP, although delayed, has shown new ways of implementing the French national health strategy with many practical examples. Within TSD work on the implementation in Strasbourg will continue and the experience will probably be spread in other TSD geographic areas. Next steps will be: • accessing national health data based to improve analytical basis for the evaluation of health and preventive care interventions • design and implementation of patient pathways • explore mechanisms for patient data sharing across provider networks • strengthened collaboration with hospitals and hospital networks (GHT)
Other information	**Answer**
Funding	In parallel to the EU JADECARE programme, which mainly funds the exchange of expertise, local activities are funded by • the City and Eurométropole of Strasbourg for the sports on prescription program • The national TSD grand for a variety of subprojects, which are partly linked to the implementation of the LGP • the local health contract (CLS), not yet signed These funding sources will amongst others guarantee the sustainability and further development of the JADECARE achievements

The Viljandi hospital, Estonia (VH)

Pre-implementation

Scope definition

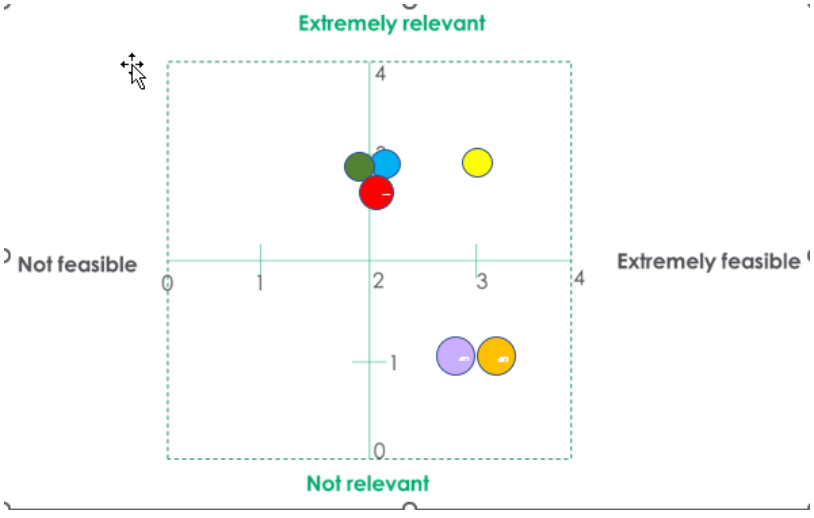
Identified and prioritized needs

Block	Needs (grouped)
Overall coordination and integration strategy	Agreeing common goals and measures for improving coordination and integration (need 1 and 2)
	Establishing an action plan for improving coordination and integration and monitoring the progress(need 3 and 4)
Understanding the needs of local populations	Case finding and risk stratification (need 5)
	Needs assessment, care planning and monitoring interventions (need 6 and 7)
	Monitoring the interventions on population level, developing population needs profiles and identifying prioritization areas (need 8 and 9)
Incentivising cooperation, coordination and integration	Supporting cooperation culture, including management level support (need 10 and 11)
	Improving role-clarity across different pathway phases (need 12).

	Ensuring that funding models are lined with overall coordination goals and there is funding for missing (but needed) coordination roles (needs 13 and 14).
Better use of data	Sharing relevant case level data across case network (need 15)
	Using secondary data for planning, development and policy (need 16, 17, 18 and 19)
Coordination measures	Collecting patient and provider reported feedback (need 20 and 21)
	Using secondary measures to assess the effectiveness of coordination regionally and nationally (need 22 and 23)
New care pathways	Identifying critical care pathways and understanding the shortcomings in current processes (need 24 and 25)
	Developing, testing and implementing wholistic person-centred care pathways with all stakeholders equipped and motivated to fulfil their roles in pathways (need 26, 27, 28 and 29)

Assessment of Core Features

Core Feature	Relevance	Feasibility
Core Feature B1-CF1	3	3
Core Feature B1-CF2	3	2
Core Feature B1-CF3	3	2
Core Feature B1-CF4	3	1
Core Feature B2-CF1	3	2
Core Feature B2-CF2	3	1



Final Core Features selected

Core Feature B1-CF1:	Identifying current contractual arrangements and assessing possibilities for value-based contracting
Core Feature B1-CF2:	Defining data standards and appropriate outcome measures
Core Feature B1-CF3:	Designing the valued-based payment framework
Core Feature B2-CF1:	Identifying and liaising with stakeholder groups

Situation analysis

Risk stratification

	Strengths	**Weaknesses**
Internal	• Digital infrastructure to support integrated care are piloted but there is not yet region-wide coverage. • Some integrated care initiatives and services are evaluated as part of a systematic approach. • Innovations are captured and there are some mechanisms in place to encourage knowledge transfer. • management level support for coordination goals	• Risk stratification not started • Need 2. Linking relevant measures to common goals • Need 9. Development of populations needs profiles and identifying prioritization areas • Need 13. Payment for new coordination roles (e.g., network managers, care coordinators etc.)
	Opportunities	**Threats**
External	• Consensus-building underway. Experimenting different funding models/components. • Some standardised coordinated care processes are underway; guidelines are used, some initiatives and pathways are formally described, systematic approach is planned. • Coordination of social care service an d health care service needs is introduc ed. • Cooperation on capacity building for i nte-grated care is growing across the region. • Patient level information on services, sick leaves, prescriptions, medical devices	• Lack of agreed technical standards exists to enable shared procurement of new systems, some large-scale consolidations of ICT are underway. • Consolidated and coordinated innovation funding not available through competitions/grants for individual care providers and small-scale implementation. • No systematic approach to inhibitors and their management in place. • Need 1. Agreeing common goals for improving coordination and integration • Ensuring that funding models are lined with overall coordination and integration goals • Need 13. Payment for new coordination roles (f.ex network managers, care coordinators etc) • Lack of digital infrastructure cross-used by all stakeholders

Strategic Intervention Areas

Strategic intervention area	Priority score (1 to 3)	Rank-ing
Continue cooperation in the provision of integrated and coordinated services - develop networking and coordinated service provision in the region in cooperation with partners in the health and care sector, including the conclusion of cooperation agreements	2	4
Actively participate in national initiatives on the development of coordinated care pro-cesses and their funding models	3	3
Start risk stratification and profiling the needs of the population in the region	3	2
Launch a cross-sectoral discussion to ensure the consistency of the funding model with the overall coordination and integration objectives	3	1
Ensure continued support at management level for coordination objectives	1	5

Definition of the LGP and LAP

Local Good Practice

Local Good Practice	A funding model for person-centred and integrated services	
Target population	**Setting(s)**	
~50 000	Viljandi county	
Main aim		
Prepare a funding model coupled with risk stratification model to be implemented in Viljandi county .		
Outcomes	**Local Core Features and their Components**	**Inputs**
• Cooperation between Viljandi Hospital and other service providers is carried out • IT tools supporting inte-grated care funding mod-elling and risk stratifica-tion • Funding model has been proposed in integrated care provision in Viljandi county • Assesment feasibility of nationwide implementa-tion of oGP-s	• Risk stratification model • Case finding • Value-based contracting and payment framework • Analytical model to exe-cute the contract	• Assessment of transfera-bility of Optimedis frame-work • Assessment of transfera-bility of risk stratification and case finding tools • Identification of steps for adoption of the Catalan popula-tion-based risk stratifica-tion tool into the ecosys-tem of the next adopter
General description		
Generating predictive model is needed in order to strengthen population health management and provide better-tailored services for risk groups. Contracting and funding models developed are lined with person-centred and integrated services.		

Local Core Feature 1
Develop a risk stratification approach based on AMG.
Local Core Feature 2
Valued-based payment framework.
Local Core Feature 3
Analytical model to execute the contract.

Local Action Plan

Local Good Practice	A funding model for person-centred and integrated services
Main aim	
Prepare a funding model to be implemented in Viljandi county together with the operational programme.	
Related original Good Practices and their Core Feature (s)	Mix'n'Match OptiMedis, Catalonian AMG
Local Core Feature 1	Funding model with analytical framework and risk stratification model
SMART objective	
We will design a contracting and payment framework approach based on OptiMedis that includes Catalonian AMG risk stratification model.	

Activities	**Actors**	**Resources**	**Setting(s)**	**Timeline**	**Key Performance Indicators**
• Create a core group to define the local contracting and payment framework model	• GPs, nurses • Hospital doctors and nurses • Healthcare planning experts	• Professionals from different settings	• GP practices • Viljandi Hospital • Estonian Ministry of Social Affairs	01.01.2022, 3 months	• Number and profile of professionals engaged in the definition of the contracting and payment framework approach
• Establish criteria for contracting and payment framework	• Healthcare professionals • OptiMedis experts • AMG experts	• Professionals from different settings	• Viljandi Hospital • Estonian Ministry of Social Affairs • EHIF	02.02.2022 4 months	• List of criteria used for contracting and payment framework (Y/N)
• Set up the data extraction and	• IT experts • Data scientists	• OptiMedis experts • AMG experts	• Viljandi Hospital	01.01.2022 5 months	• Database creation (Y/N) • Technical design (%)

processing mechanisms	• OptiMedis experts • AMG experts	• IT infrastructure • Subcontractor for technical development			• Functional design (%)
• Implement case finding and risk stratification	• IT experts • Data scientists • OptiMedis experts • AMG experts	• IT infrastructure • Subcontractor for technical development	• Viljandi Hospital	01.04.2022 5 months	• Case finding and risk stratification tool is implemneted (Y/N)
• Design contracting and payment framework	• GPs, • Hospital mgmt • OptiMedis experts • AMG experts	• Professionals from different settings	• Viljandi Hospital • Estonian Ministry of Social Affairs • EHIF	01.04.2022 5 months	• Contracting and payment framework agreed (Y/N)
• Assess case finding and risk stratification based contracting and payment framework against estabilisehed criteria	• Experts • Healthcare professionals • Healthcare planning experts	• Professionals from different settings	• Viljandi Hospital • GP practices • Estonian Ministry of Social Affairs • EHIF	01.09.2022 3 months	• Conformance report (Y/N)

Implementation

1st PDSA Cycle

Plan

Activities (from the LAP)	Actions	Actors	Timeline	KPIs MEASURE				
				KPIs (from the LAP)	Who will collect the data?	When will the data be collected?	How will the data be collected?	Target value
Create a core group to define the local contracting and payment framework model	• Reaching core stakeholders agreement	• GPs, nurses • Hospital doctors and nurses • Healthcare planning experts	01.01.22-31.01.22	• Number and profile of professionals engaged in the definition of the contracting and payment framework approach	• VH project manager	• On stakeholder's meetings	• Registration forms	• 5
	• Expanding and agreeing with key stakeholders	• GPs, nurses • Hospital doctors and nurses • Healthcare planning experts]	01.02.22-28.02.22					
	• Agreeing on all stakeholder's letter of intent of Viljandi county	• GPs, nurses • Hospital doctors and nurses • Healthcare planning experts]	01.03.22-31.03.22					
Establish criteria for contracting and payment framework	• Introduction and creating possible scenarios	• Experts • Healthcare professionals	02.02.22-28.02.22	•List of criteria used for contracting and payment framework (Y/N)	• VH project manager	• On workshop 4	• Agreement	• Yes
	• Agreeing roadmap	• Experts • Healthcare professionals	01.03.22-31.03.22					
	• Defining alternatives	• Experts	01.04.22-30.04.22					

		• Healthcare professionals						
	• Concluding agreement	• Experts • Healthcare professionals	01.05.22-31.05.22					
Set up the data extraction and processing mechanisms	• Improving incrementally data extract and loading (ETL) according to model requirements - Phase 1	• IT experts • Data scientists	01.03.22-31.01.22	•Database creation (Y/N) •Technical design (%) •Functional design (%)	• VH project manager	• After Phase 5 data extract and loading	• Phase 5 report on data extract and loading	• Yes • % • %
	• Improving incrementally data extract and loading (ETL) - Phase 2	• IT experts • Data scientists	01.02.22-28.02.22					
	• Improving incrementally data extract and loading (ETL) - Phase 3	• IT experts • Data scientists	01.03.22-31.03.22					
	• Improving incrementally data extract and loading (ETL) - Phase 4	• IT experts • Data scientists	01.04.22-30.04.22					
	• Improving incrementally data extract and loading (ETL) - phase 5	• IT experts • Data scientists	01.05.22-31.05.22					
Implement case finding and risk stratification	• Gathering and systematising	• IT experts • Data scientists	01.4.22-30.4.22			• After publishing local	• Published local case finding	• Yes

	LAP specific information and planning further action based upon agreed roadmap			•Case finding and risk stratification tool is implemented (Y/N)	• VH project manager	case finding and risk stratification framework	and risk stratification framework	
	• Drafting local case finding and risk stratification framework	• IT experts • Data scientists	01.05.22-31.5.22					
	• Drafting local case finding and risk stratification framework	• IT experts • Data scientists	01.06.22-30.06.22					
	• Agreeing on local case finding and risk stratification framework	• IT experts • Data scientists	01.08.22-31.08.22					
Design contracting and payment framework	• Gathering and systematising LAP specific information and planning further action based upon agreed roadmap	• Experts • Healthcare professionals • Healthcare planning experts	01.4.22-30.4.22	•Contracting and payment framework agreed (Y/N)	• VH project manager	• After publishing local contracting and payment framework	• Published local contracting and payment framework	• Yes
	• Drafting local contracting and payment framework	• Experts • Healthcare professionals • Healthcare planning experts	01.05.22-31.5.22					
	• Improving local contracting and	• Experts • Healthcare professionals	01.06.22-30.06.22					

	payment framework	• Healthcare planning experts						
	• Agreeing on local contracting and payment framework	• Experts • Healthcare professionals • Healthcare planning experts	01.08.22-31.08.22					
Assess case finding and risk stratification based contracting and payment framework against established criteria	• Introducing preliminary report and gathering feedback	• Experts • Healthcare professionals • Healthcare planning experts	01.09.22-30.09.22	•Conformance report (Y/N)	• VH project manager	• After publishing stakeholders contracting and payment framework model agreement	• Published stakeholders contracting and payment framework model agreement	• Yes
	• Introducing improved report and gathering feedback	• Experts • Healthcare professionals • Healthcare planning experts	01.10.22-31.10.22					
	• Introducing agreement draft and gathering feedback. • Finalizing report and agreement	• Experts • Healthcare professionals • Healthcare planning experts	01.11.22-30.11.22					

Do

Cycle number (1 or 2)	1	
Activity	**KPI**	**Actual value**
Create a core group to define the local contracting and payment framework model	• Number and profile of professionals engaged in the definition of the contracting and payment framework approach	5
Establish criteria for contracting and payment framework	•List of criteria used for contracting and payment framework (Y/N)	Y
Set up the data extraction and processing mechanisms	•Database creation (Y/N) •Technical design (%) •Functional design (%)	Y 100% 100%
Implement case finding and risk stratification	• Case finding and risk stratification tool is implemented (Y/N)	
Design contracting and payment framework	• Contracting and payment framework agreed (Y/N)	
Assess case finding and risk stratification based contracting and payment framework against established criteria	• Conformance report (Y/N)	

QUESTIONS	**ANSWERS**
What was actually implemented? Any deviation from the planned actions	Health care professionals from primary care & hospital care are engaged (GPs, specialist doctors, RN both family nurses and hospital and home care nurses, social workers, data manger), planned no (5) was exceeded for synergy of combined expertise. There is a list of criteria of the contracting and payment framework approach created. Database is created and design requirements for technical and functionality fulfilled.
Problems? Unexpected findings? Please describe	Due to current situation in health care has slowed down the planned activities, meetings have been held, plans expanded and agreed with key stakeholders discussed.

IMPLEMENTATION PROGRESS OF THE LOCAL GOOD PRACTICE			
0-25%	**25-50%**	**50-75%**	**75-100%**
	X		

Study

Cycle number (1or 2)	1

Activity	KPI	Target value (from PLAN)	Actual value (from DO)	Reasons for the deviations	Mitigation actions implemented	Impact of mitigation actions
Create a core group to define the local contracting and payment framework model	•Number and profile of professionals engaged in the definition of the contracting and payment framework approach	5	5	No deviations		
Establish criteria for contracting and payment framework	•List of criteria used for contracting and payment framework (Y/N)	Y	Y	No deviations		
Set up the data extraction and processing mechanisms	•Database creation (Y/N) •Technical design (%) •Functional design (%)	Y	Y 100% 100%	No deviations		
Implement case finding and risk stratification	•Case finding and risk stratification tool is implemented (Y/N)	Y				
Design contracting and payment framework	•Contracting and payment framework agreed (Y/N)	Y				
Assess case finding and risk stratification based contracting and payment framework against established criteria	•Conformance report (Y/N)	Y				

Act

Cycle number (1 or 2)	1		
Activity	**Maintain**	**Adapt**	**Abandon**
Create a core group to define the local contracting and payment framework model	X		
Establish criteria for contracting and payment framework	X		
Set up the data extraction and processing mechanisms	X		
Implement case finding and risk stratification	X		
Design contracting and payment framework	X		
Assess case finding and risk stratification based contracting and payment framework against established criteria	X		

QUESTIONS	ANSWERS
Any new proposed action for the future?	oGP expertise is present and available; national stackeholders are interested; discussions are in place to define synergies between partners and opportunities

2nd PDSA Cycle

Plan

LCF1	**Develop a funding model for person-centred and integrated services**: • Risk stratification model • Case finding • Value-based contracting and payment framework • Analytical model to execute the contract							
Activities (from the LAP)	**Actions**	**Actors**	**Timeline**	**KPIs MEASURE**				
				KPIs (from the LAP)	Who will collect the data?	When will the data be collected?	How will the data be collected?	Target value
Create a core group to define the local contracting and payment framework model	• Reaching core stakeholders agreement	• GPs, nurses • Hospital doctors and nurses • Healthcare planning experts	01.01.22-31.01.22	• Number and profile of professionals engaged in the definition of the contracting and payment framework approach	• VH project manager	• On stakeholder's meetings	• Registration forms	• 5
	• Expanding and agreeing with key stakeholders	• GPs, nurses • Hospital doctors and nurses • Healthcare planning experts]	01.02.22-28.02.22					
	• Agreeing on all stakeholder's letter of intent of Viljandi county	• GPs, nurses • Hospital doctors and nurses • Healthcare planning experts]	01.03.22-31.03.22					

Establish criteria for contracting and payment framework	• Introduction and creating possible scenarios	• Experts • Healthcare professionals	02.02.22-28.02.22	•List of criteria used for contracting and payment framework (Y/N)	• VH project manager	• On workshop	• Agreement	• Yes
	• Agreeing roadmap	• Experts • Healthcare professionals	01.03.22-31.03.22					
	• Defining alternatives	• Experts • Healthcare professionals	01.04.22-30.04.22					
	• Concluding agreement	• Experts • Healthcare professionals	01.05.22-31.05.22					
Set up the data extraction and processing mechanisms	• Improving incrementally data extract and loading (ETL) according to model requirements - Phase 1	• IT experts • Data scientists	01.01.22-31.01.22	•Database creation (Y/N) •Technical design (%) •Functional design (%)	• VH project manager	• After Phase 5 data extract and loading	• Phase 5 report on data extract and loading	• Yes • % • %
	• Improving incrementally data extract and loading (ETL) - Phase 2	• IT experts • Data scientists	01.02.22-28.02.22					
	• Improving incrementally data extract and loading (ETL) - Phase 3	• IT experts • Data scientists	01.03.22-31.03.22					
	• Improving incrementally data extract and loading (ETL) - Phase 4	• IT experts • Data scientists	01.04.22-30.04.22					
	• Improving incrementally data extract and loading (ETL) - phase 5	• IT experts • Data scientists	01.05.22-31.05.22					
Implement case finding and risk stratification	• Gathering and systematising LAP specific information and planning further action based upon agreed roadmap	• IT experts • Data scientists	01.4.22-30.4.22	•Case finding and risk stratification tool is implemented (Y/N)	• VH project manager	• After publishing local case finding and risk stratification framework	• Published local case finding and risk stratification framework	• Yes
	• Drafting local case finding and risk stratification framework	• IT experts • Data scientists	01.05.22-31.5.22					

	• Drafting local case finding and risk stratification framework	• IT experts • Data scientists	01.06.22-30.06.22					
	• Agreeing on local case finding and risk stratification framework	• IT experts • Data scientists	01.08.22-31.08.22					
Design contracting and payment framework	• Gathering and systematising LAP specific information and planning further action based upon agreed roadmap	• Experts • Healthcare professionals • Healthcare planning experts	01.4.22-30.4.22	•Contracting and payment framework proposed (Y/N)	• VH project manager	• After publishing local contracting and payment framework	• Published local contracting and payment framework	• Yes
	• Drafting local contracting and payment framework	• Experts • Healthcare professionals • Healthcare planning experts	01.05.22-31.5.22					
	• Improving local contracting and payment framework	• Experts • Healthcare professionals • Healthcare planning experts	01.06.22-30.06.22					
	• Improving local contracting and payment framework based on CPTS contracting and payment framework	• Experts • Healthcare professionals • Healthcare planning experts	01.08.22-31.08.22					
Assess proposed case finding and risk stratification	• Introducing preliminary report and gathering feedback	• Experts • Healthcare professionals	01.09.22-30.09.22	•Conformance report (Y/N)	• VH project	• After publishing stakeholders contracting and	• Published stakeholders con-	• Yes

based contracting and payment framework against established criteria		• Healthcare planning experts			man-ager	payment framework model agreement	tracting and payment framework model agreement	
	• Introducing improved report and gathering feedback	• Experts • Healthcare professionals • Healthcare planning experts	01.10.22-31.10.22					
	• Introducing agreement draft and gathering feedback. • Finalizing report and agreement	• Experts • Healthcare professionals • Healthcare planning experts	01.11.22-30.11.22					

Do

Cycle number (2)		
Activity	**KPI**	**Actual value**
Implement case finding and risk stratification	Case finding and risk stratification tool is implemented (Y/N)	Y
Design contracting and payment framework	Contracting and payment framework agreed (Y/N)	Y
Assess case finding and risk stratification based contracting and payment framework against established criteria	Conformance report (Y/N)	Y

QUESTIONS	ANSWERS
What was actually implemented? Any deviation from the planned actions	Case finding and risk stratification tool is used locally, sustainability actions are planned to implement the tool at national level (national project "PAIK2022-2025" initiated). Contracting and payment framework agreed among the current project team, discussions with stakeholders done and framework implementation will follow over soem tiem of the periode.
Problems? Unexpected findings? Please describe	Regarding the contracting and payment framework model implementation on municipality level - the local level stakeholders & collaborative partner active involvement is slightly slowed down due to the rised workload related to their usual tasks, and the change of contact person; stakeholders contracting and payment framework model agreement reporting delayed.

IMPLEMENTATION PROGRESS OF THE LOCAL GOOD PRACTICE			
0-25%	**25-50%**	**50-75%**	**75-100%**
			X

Study

Cycle number (1or 2)		2				
Activity	**KPI**	**Target value (from PLAN)**	**Actual value (from DO)**	**Reasons for the deviations**	**Mitigation actions implemented**	**Impact of mitigation actions**
Implement case finding and risk stratification	•Case finding and risk stratification tool is implemented (Y/N)	Y	Y	No deviations		
Design contracting and payment framework	•Contracting and payment framework proposed (Y/N)	Y	Y	No deviations		
Assess case finding and risk stratification based contracting and payment framework against established criteria	•Conformance report (Y/N)	Y	Y	No deviations		

Act

Cycle number (2)			
Activity	**Maintain**	**Adapt**	**Abandon**
Activity 1			
Implement case finding and risk stratification	X		
Activity 2			
Design contracting and payment framework	X		
Activity 3			
Assess case finding and risk stratification based contracting and payment framework against established criteria	X		

QUESTIONS	ANSWERS
Any new proposed action for the future?	No completely new activities proposed but some oGP support while ensuring the sustainability (both on regional and national level) of already planned and tested activities might be benefitial.

Post-implementation

ITEM	ANSWER
Title and Abstract	
Title	**An initiative to generating predictive model in order to strengthen population health management and provide better-tailored services for multimorbidity risk group patients in Estonia.**
Abstract	Background: Estonia had a mix and match approach in JADECARE as a next adopter. The implementation of the elements of OptiMedis module and Catalan risk patient identification tool took place in time. The reasoning behind the adapting and implementing process of the chosen elements of original good practices came from having a need for a predictive model in order to strengthen population health management and provide better-tailored services for multi-morbidity patient risk groups in Estonia. Contracting and funding model which facilitates person-centred care provision was seen as something that could potentially help add extra value for those same groups. Estonia entered the project aiming to design a contracting and payment framework approach based on the OptiMedis model and a risk stratification model based on the Catalonian AMG approach. The main aim was to prepare a funding model coupled with risk stratification model to be implemented in Viljandi county. Local problem: Triggers for local good practice were as follows: no frameworks of integrated care provision in the country, value-based contracting practically missing in Estonia, the different payment schemes for hospital and ambulatory care have impact on incentivizing the transformation from case-based care (FFS) to population health-oriented care model. Moreover, the lack of risk stratification and case finding tools to facilitate high risk patient identification for care-management service were reasons to encourage the active participation in JADECARE project. Methods: Evaluation of integrated care services was planned and established as part of a systematic approach. Target population was elderly with concomitant chronic diseases and social health determinants at a high risk of hospitalization. Key components of service were vertical and horizontal integration, care management, patient-centered care process. Interventions: Original good practice chosen for the implementation was two-folded: (1) Catalan risk stratification and case finding tool consisting of identifying high risk patients for care management initiatives in the Viljandi county and to predict the needs of care for the region; (2) OptiMedis accountable care organization (ACO) focusing on local care organization and steering organization to better align providers around persons for person centred care delivery, choosing and implementing other integrated care pathways in the region and to monitor performance of care delivery. Results: Regional formation of ACO framework created and local interests mapped (e.g. fracture prevention, timely stroke detection and intervention, different addiction treatments). State insurance fund claims databases available and ready to feed data to the original good practice risk stratification algorithms. Additional regional care pathways are operational (e.g. post-stroke care) and some are still under construction (e.g. osteoporosis, diabetes). Care management functionality is planned for the Estonian central health record (eHealth) system and a front-end solution to our regional providers. Capacity building with care manager educational programs is under way. Challenges, barriers, and main facilitators of the implementation process are mapped. Conclusions: Case finding and risk stratification tool is planned to be used locally, sustainability actions are planned to implement the tool at national level project initiated and funded by the Estonian Health Insurance Fund, under the the innovation fund funding.
Why did you start?	**Answer**
Problem description	Digital infrastructure to support integrated care was piloted in Estonia but there was not yet region-wide coverage. Some standardised coordinated care processes were underway;

	guidelines used, some initiatives and pathways were formally described. On national level the coordination of social care service and health care service needs was introduced. Threats considered related to lack of agreed technical standards existing to enable shared procurement of new systems, some large-scale consolidations of ICT were underway. Consolidated innovation funding was not available.
Available knowledge	The World Bank project in collaboration with Estonian Health Insurance Fund and the Estonian Family Physicians Association started the pilot of risk-stratified care management approach already in 2017. "In Estonia, risk-stratified care management approach was first introduced in primary care to provide better help to high-risk patients who usually suffer from several chronic diseases, other accompanying conditions and are at high risk of health status deterioration and increased healthcare utilization. High-risk patient care management module aimed at creating a tool for family physicians and nurses, which could be used to act proactively in order to avoid the deterioration of the condition of chronically ill patients and to better manage their care process in cooperation with specialized medical care and the social system. The pilot included 96 randomly selected practice lists with more than 2000 patients. More than 70% of family physicians were satisfied with risk-stratified care management and found it a valuable tool to improve the monitoring of chronically ill patients. The results showed that, the care management for chronically ill patients has become more patient-centred and the number of visits to family physicians, as well as the number of consultations with family nurses have increased. At the same time, more than half of the physicians admitted that this approach to the care of chronically ill patients requires more time. One of the biggest challenges is insufficient cooperation with social assistance authorities to support chronically ill patients, who also face socio-economic problems." The PAIK project (2016-2020) is an area-specific support service for providing continuous healthcare and top social services in Viljandi county in Estonia. PAIK is a pilot project initiated by Viljandi Hospital and the Ministry of Social Affairs and funded by the Estonian Health Insurance Fund. This project combined health and social care parties for the benefit of people: e.g. family physician, specialist doctors, local government social worker and pharmacist, the community and family. The objectives of the project were as follows: (1) to improve cooperation between healthcare areas and the social system; (2) to provide support for patients coping with chronic disease; (3) to value a patient-focused approach in the treatment process; (4) to reduce overlap in health and social care. The target group consisted of residents in the Viljandi area who had been diagnosed with a chronic condition and required social support.
Rationale	Triggers for local good practice were as follows: no frameworks of integrated care provision in the country, value-based contracting practically missing in Estonia, the different payment schemes for hospital and ambulatory care have impact on incentivizing the transformation from case-based care (FFS) to population health oriented care model. Moreover, the lack of risk stratification and case finding tools to facilitate high risk patient identification for care-management service were reasons to encourage the active participation in JADECARE project. The reasoning to develop and implement the original good practices based on the need of generating a predictive model in order to strengthen population health management and provide better-tailored services for multi-morbidity patient risk groups. Contracting and funding model which facilitates person-centred care provision add extra value.
Specific aims	The ultimate aim was improving the results of the health and quality of life of the population and increase the efficiency of the healthcare system through better planning and use of resources.

	Estonia entered the project aiming to design a contracting and payment framework approach based on the OptiMedis model and a risk stratification model based on the Catalonian AMG approach. The main aim was to prepare a funding model coupled with risk stratification model to be implemented in Viljandi county. Local core feature and their components were following: to develop a county wide risk stratification approach based on Catalan AMG, valued-based payment framework and analytical model to execute the contract.
What did you do?	**Answer**
Context	Estonia is a country on the eastern coast of Baltic Sea, total area 45227 km2, population 1.3 mln. The service are of Viljandi hospital is a about ~50 000 people. Type of hospitals in the Estonian Hospital Network Development Plan are as follows: regional, central, general, and local hospitals. We have compulsory solidarity-based health insurance and it is financed mostly from the state budget (social tax) under the health insurance budget through the means of the Estonian Health Insurance Fund and through direct allocations. Viljandi hospital is a general hospital, it consists of 7 clinics, 3 centres, medical and non-medical support services. We have a 3 year experience implementation of integrated care project, called PAIK service pilot. It is crucial to notice that there is no value-based payment models in place resulting in a very fragmented health and social care system and integrated models for taking care of people with complex needs are lacking. Primary care is covered by 30 GPs.
Intervention(s)	Target population is elderly with concomitant chronic diseases and social health determinants at a high risk of hospitalization. Key components of service: vertical and horizontal integration, care management, patient-centered care process. Triggers for Estonian local good practice were as follows: • No frameworks of integrated care provision in the country • Value-based contracting so-far missing in Estonia • Different payment schemes for hospital and ambulatory care => impact on incentivizing the transformation from case-based care (FFS) to population health oriented care model. • Paucity of risk stratification and case finding tools to facilitate high risk patient identification for care-management services • No accountable care organizations in Estonia Implementation steps were following: 1. A core group to define the local contracting and payment framework model was created 2. Criteria for contracting and payment framework was established 3. The data extraction and processing mechanisms were set up 4. Case finding and risk stratification implemented 5. Contracting and payment framework was designed 6.Proposed case finding and risk stratification based contracting and payment framework against established criteria were assessed Core group consisted of following specialists: GPs and nurses; hospital doctors and nurses; health care planning experts; social workers, and social work coordinators at municipality level; IT experts, data scientist, ministry representative.
Study of the Intervention(s)	*Assessment of transferability of OptiMedis framework, risk stratification and case finding tools, and identification of steps for adoption of the Catalan population–based risk stratification tool in Estonia.

	Challenges to implementation noted: • Availability of health professional time to dedicate to JADECARE actions • Healthcare sector is very conservative • Overburdened primary and specialist healthcare system – little time and resources for process improvement and planning • Setback in the IT department – change of our hospital medical records system caused loss of important functionality • Medical and social support records are not on the same IT platforms in Estonia Other barriers of implementation progress: • Changes and ambitions at the local level slow to reach the decision makers on state level • Fee-for-service payment model not best suited for integrated care provision and payment models slow to change • Doctors do not perceive value of healthcare and the social system co-operation • Limited social support system capacity • Teams changing and constant deficit of the workforce in rural areas Main facilitators were mapped: • Motivated leadership in the region • Ministry of Social Affairs and the Health Insurance Fund were interested in integrated care and care pathways implementation • Support from IFIC (since 2018) and JADECARE teams • For sustainiability, the financial support granted for PAIK 2022-2025 project, funding from the Estonian Health Insurance Fund • Strong core team in Viljandi
Measures	Key performance indicators of the Local Action Plan: • Case finding and risk stratification tool is implemented • Contracting and payment framework agreed Case finding and risk stratification tool is used locally, sustainability actions are planned to implement the tool at national level (national project "PAIK2022-2025" initiated). Contracting and payment framework agreed among the current project team, discussions with stakeholders done and framework implementation will follow over some time of the period.
Analysis	The presented analysis is based on the local action plan and PDSA-cycle, PLAN and STUDY. At the first half of the project period, till June 2022 the following activities with no deviations were reached: a core group was created to define the local contracting and payment framework model; the criteria for contracting and payment framework were established and the data extraction and processing mechanisms were set up. By the end of the project period, November 2022, the remaining activities of the local action plan and PDSA-cycle with no deviations were reached: case finding and risk stratification tool implemented on local level; the framework of contracting and payment was designed, the case finding and risk stratification based contracting and payment framework against established criteria were assessed.
What did you find?	**Answer**
Results	There were no deviations identified related to the PDSA-cycle DO and STUDY-steps on planned actions. No completely new activities were proposed but some oGP support while ensuring the sustainability (both on regional and national level) of already planned and tested activities might be benefitial.

	Regional formation of ACO framework was created and local interests were mapped (e.g. fracture prevention, timely stroke detection and intervention, different addiction treatments). State insurance fund claims databases available and is ready to feed data to the original good practice risk stratification algorithms. Additional regional care pathways are operational (e.g. post-stroke care), and some are still under construction (e.g. osteoporosis, diabetes). Care management functionality is planned for the Estonian central health record (eHealth) system and a front-end solution to our regional providers. Capacity building with care manager educational programs is under way. Case finding and risk stratification tool is used locally, sustainability actions are planned to implement the tool at national level as national project "PAIK 2022-2025" was initiated. Contracting and payment framework agreed among the current project team, discussions with stakeholders are carried out and framework implementation will follow over some time of the periode.
What does it mean?	**Answer**
Summary	To sum up: Regional formation of ACO framework was created and local interests were mapped (e.g. fracture prevention, timely stroke detection and intervention, different addiction treatments). State insurance fund claims databases available and is ready to feed data to the original good practice risk stratification algorithms. Additional regional care pathways are operational (e.g. post-stroke care), and some are still under construction (e.g. osteoporosis, diabetes). Care management functionality is planned for the Estonian central health record (eHealth) system and a front-end solution to our regional providers.
Interpretation	**Noted above**
Limitations	Though all the aims were reached presented in the local action plan, the time factor must be noted. All staff involved, led under the time preassure of their daily job. Regarding the contracting and payment framework model implementation on municipality level - the local level stakeholders and collaborative partner active involvement is slightly slowed down due to the rised workload related to their daily tasks, and the change of contact person; stakeholders contracting and payment framework model agreement reporting delayed.
Conclusions	Case finding and risk stratification tool is used locally, sustainability actions are planned to implement the tool at the national level project initiated and funded by the Estonian Health Insurance Fund.
Other information	**Answer**
Funding	In addition to the JADECARE funding, Viljandi hospital provided needed funding to cover additional costs

The German speaking community in Belgium – Dienststelle für selbstbestimmtes Leben (DSL)

Pre-implementation

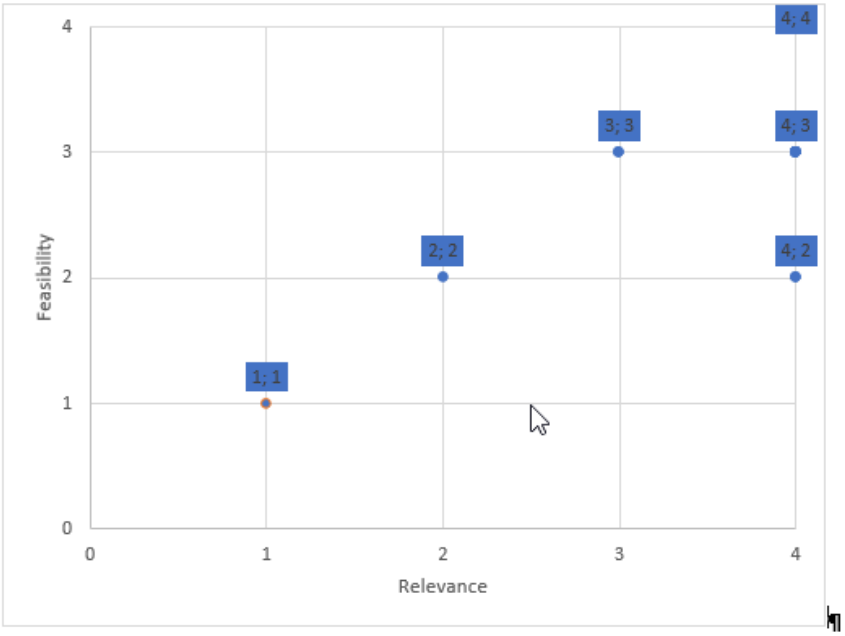
Scope definition

Identified and prioritized needs

Block	Needs (prioritized)
B1 Shared savings contract with reimbursement/commissioning organizations	Appropriate value-based payment framework: Work out a proposal and negotiate with Federal level
B2 - A model including strong stakeholder engagement	Establish an effective and efficient Governance structure
B3 - Electronic integration across provider	Assessing current IT integration status Assess tools adequate to improve It integration at local level but also with the federal platforms Training the providers to use these tools
B4 Patient involvement and empowerment	Use tools of health management for the persons with comprehensive health checks and health related goals
B5 Data-driven management	Develop and use performance dashboard and analyse tools to achieve 3 Aim in the region
B6 – Prevention, health promotion and public health	Use and develop care programmes and individual care plans

Assessment of Core Features

Core Feature	Relevance	Feasibility
Core Feature 1.1	4	4
Core Feature 1.2	4	3
Core Feature 1.3	4	2
Core Feature 1.4	4	2
Core Feature 2.1	4	4
Core Feature 2.2	4	4
Core Feature 3.1	4	4
Core Feature 3.2	4	4
Core Feature 3.3	4	3
Core Feature 3.4	3	3
Core Feature 4.1	2	2
Core Feature 4.2	4	3
Core Feature 4.3	4	3
Core Feature 4.4	3	3
Core Feature 5.1	4	3
Core Feature 5.2	4	3
Core Feature 5.3	4	4
Core Feature 6.1	4	3
Core Feature 6.2	4	3
Core Feature 6.3	4	4



Final Core Features selected

CF 1.1	identifying current contractual arrangements and assessing possibilities for value based contracting
CF 1.2	defining data standards and appropriate outcome measures
CF 1.3	designing the valued-based payment framework
	CF 1.4 constructing the analytical model to execute the contract
CF 2.1	Identifying and liaising with stakeholder groups
CF 2.2	Creating appropriate governance structures
CF 3.1	Assessing state of current health IT integration and IT tools in use
CF 3.2	Market assessment on tools adequate to improve IT connectivity of providers
CF 3.3	Training with providers to assess incentives for IT deployment and usability assessment
CF 3.4	Patient access to their data (Open Notes approach)
CF 4.1	Patient advisory boards
CF 4.2	Shared decision making tools and self-management support
CF 4.3	Comprehensive health checks and health-related goals
CF 4.4	Providing training on incentives and tools to implement patient centered care
CF 5.1	Potential analysis tool

CF 5.2	Performance dashboards
CF 5.3	FORTA tool to identify over- and underutilization regarding prescriptions
CF 6.1	Individual treatment plans and care programmes
CF 6.2	Care planning based on Chronic care model
CF 6.3	Patient coaching

Situation analysis

	STRENGTHS	WEAKNESSES
INTERNAL	- The German speaking Community is generally well positioned to respond to the different needs of the population in the health and social sectors. There are a variety of services that are offered in German, relatively close to home and at low thresholds. These include the two hospital locations, the service providers in the field of home care, the general and specialist practitioners, the nursing homes, the psychiatric services, the health insurance companies, independent health service providers such as physiotherapists, occupational therapists, speech therapists, pharmacists, psychologists, ... as well as more commercially oriented health actors such as fitness studios. In addition, two other important resources can be drawn on locally in the context of integrated care: a strongly developed voluntary and association system in the sports, cultural and social sectors, a high level of (intra-family) solidarity, which is particularly noticeable among caring relatives. - - The inhabitants of the region generally have a high level of health awareness. They do sport regularly, statistically visit the family doctor or a specialist regularly. They thus invest heavily in their own health and thus already seem to intuitively follow a person's course of action in the field of integrated care to a certain extent. As a result, it can also be assumed that	- Generally, waiting lists exist for a variety of services in the health sector. These do not only concern specialist treatments but are also found in some therapeutic areas such as physiotherapy or psychiatry. Services are often available to some extent, but insufficiently equipped with the necessary financial and human resources due to a shortage of professionals and/or the federal quota systems applicable in some areas. Accordingly, in some areas, due to language and geographical location in a border region, there is a clear shortage of skilled personnel in hospitals (skilled personnel with certain specialisations) and in the nursing professions, which is likely to increase, for example, due to an ageing population (already noticeable, among others, among GPs). This leads to overloads, which must be considered when setting up a system of integrated care. - - On the other hand, other existing services are often not sufficiently taken up by patients. Here, it is important to improve demand-oriented utilisation through the existence of an improved matching system. - - The great fragmentation of the service providers, especially in relation to their relatively small size, makes it difficult to professionalise cooperation and exchange among them; not because there is no willingness to do so, but because aspects such as structural cooperation or project work are at the expense of the operational work of these services. Due to the geographical and demographic division of the area, there is also an unintentional imbalance in services between

	they will participate in an integrated care model. - - The service providers have known each other for many years. Due to the competence of the German-speaking Community in parts of the health, elderly and social sectors, there has already been an intensive exchange between the providers and the Community bodies for a long time. In the course of this, knowledge has already been gathered and approaches developed for many years, which the project can now draw on in the context of integrated care. At the same time, this allows for improved coordination and resource conservation between the federal responsibilities and those of the community. - - The service providers in the region are willing and have the necessary experience to invest in innovative projects to further develop local services, to better coordinate them, to link them with each other or to go completely new ways in the development of support models for people with different support needs. In this context, reference can be made to the participation of some of some partners of the Next Adopters Working Group, within the framework of federal projects, have supported and been responsible for the emergence and further development of the coordination centre for domestic support. The Service for Self-determined Living. ensures since 2018 case management for senior citizens and persons with disabilities. - - Due to its proximity to the border and the linguistic specificity in the German speaking Community, there are structured cooperation with Belgian and German partners in the field of health care. The existing corporations work well and enable health care to be provided to the local population in line with their needs. These existing corporations also enable better cooperation when it comes to bringing about a paradigm shift towards integrated health care	the north and south of the German speaking Community, which some of the services try to compensate by having several locations or mobile services. - - There is a clear risk of increasing loneliness (especially among older people) due to lack of mobility. Here, too, the geographical situation of a rural region with smaller villages and insufficient public transport linking them to the (not only medical) centres of Eupen and St.Vith play a role. This is a weak point in the health system of the German speaking Community, especially when it comes to the use of inpatient or local services. - - There are not enough professional integration opportunities for mentally ill people in the project area, partly due to the fact that there are too few places in vocational rehabilitation for this target group. - - The data situation in the project area is currently incomplete. For example, there is a lack of information on the functioning of the sector, on the health status of the inhabitants or on specific illnesses, all of which would be necessary to ensure a system of integrated care that is best adapted to needs and possibilities in the long term. - - The information on health programmes and health campaigns in Belgium is mostly not available in German, which makes it difficult to inform the population.

	in the sector. The service providers in the German speaking Community are used to cooperating and inspiring beyond their own sphere of interest and catchment area. - In the framework of a previous integrated care project from 2016 to 2018) the DSL had already regular contacts and exchanges with the Optimedis AG. The purpose of this previous project was already to implement an integrated care model in the region, which was inspired by the Optimedis one.	
EXTERNAL	**OPPORTUNITIES**	**THREATS**
	- In the framework of the JADECARE project there could and should be a cooperation with stakeholders around Europe and in particular with Optimedis to implement the best practice Model of integrated care which suits the best to the region, due to the similarities between the regions of Kinzigtal and the German speaking Community in terms of population size, geography and language. The collaboration with Optimedis is a great opportunity to implement integrated care in the German speaking Community. - The cooperation with Optimedis in the framework of JADECARE can also be an opportunity to overcome the regulatory and legal hurdles to the implementation of integrated care. Optimedis can support the stakeholders to undergo the negotiations with the federal level and especially with the Belgian National Institute for Health and Disability Insurance to develop a regulatory and legal framework that allows the implementation of an Optimedis like integrated care model in the German speaking community. - Due to the COVID-19 crisis there is a greater awareness on the political level of the need to invest in the future of healthcare. This awareness is present on the federal and regional level and the different governments have committed to	- Since the service providers in the health sector are already working to full capacity, this project could place too much strain on the partners and thus limit their willingness to participate and invest. Accordingly, the additional services to be provided must contribute to relieving the burden on these partners. Also due to the current COVID-19 crisis many of the partners have other priorities for the moment. - - Due to the lack of data for the health sector in the project region, the evaluation of the measures could prove to be difficult. There is also a risk that the data available so far will lead to a misjudgement of the situation on the ground and thus wrong priorities will be set in a first phase. - - A project of this kind entails a certain risk for all those involved, since in a first step a financial and personnel investment is demanded of all those involved, which will only pay off at a later stage. The financing of the project must be secured, otherwise it is not possible to implement measures for integrated care in the project region. - In the framework of the implementation of the Optimedis Model of integrated care in the German speaking Community and especially concerning the implementation of the different blocks and core features we will have to cope with the Belgian federal legislation. This could be challenging especially concerning the implemen-

	undertake huge investments in the coming years. These commitments represent an opportunity also for the implementation of integrated care in the region. The Government of the German speaking Community already stated that It will support the implementation of the integrated care in the region and foresee budget to support its implementation financially. - Belgium has a digital health strategy called "Plan e santé" and the German speaking Community is an active partner in this strategy. In this framework different initiatives have been launched or will be launched to strengthen the digitalization of health, the exchange of health information between providers and access of health data by the patient itself. This could also be beneficial in the process of the implantation of integrated care.	tation and development of a Shared savings contract with reimbursement/commissioning organizations (statutory health insurance company), the electronic integration across providers and data-driven management. So in cooperation with Optimedis the NAWG hopes that we can build an integrated care model that can one the hand achieve Triple AIM and other hand be in conformity with Belgian Federal legislation.

Strategic Intervention Areas

Strategic intervention area	Priority score (1 to 3)	Ranking
Build an integrated care model that can one the hand achieve Triple AIM and other hand be in conformity with Belgian Federal legislation.	2	1
Lack of health data in the region. Increase the availability of heath data to achieve a data health management and a better matching between the needs and offers in the region	3	2
Lack of human resources especially qualified health personnel. Situation is getting worse due to the ageing of GPs for example and the competition with other neighbouring regions to attract this kind of qualified heath personnel	1	3

Definition of the LGP and LAP

Local Good Practice

Local Good Practice	Establish a population based regional integrated care system in the German speaking Community of Belgium based on the OptiMedis model
Target population	**Setting(s)**

The entire population of the region around 78.000 people	The Regional Health System of the German speaking Community

Main aim

Establish a population based regional integrated care system in the German speaking Community of Belgium based on the OptiMedis model and the Quadruple AIM and considers the regional specificities of the German speaking Community

Outcomes	Local Core Features and their Components	Inputs
• Improve the Health situation of the entire population and the quality of care • Improved resource efficiency • Improve patient satisfaction • Improve satisfaction of the healthcare providers	Feasibility study on the implementation of integrated care in the German speaking Community Analysis of Secondary Data (Statistics of the region and health indicators) Analysis of Primary Data (Survey from healthcare providers in the region) Exchanges with stakeholders and regional and national political actors to develop a business case based on the evidence gathered Development of a Business plan how can the region become a model region for integrated care. The business case consists of the different components and recommendation to achieve it and a financing plan. Establish a shared savings contract model with reimbursement/commissioning organizations Develop an appropriate shared savings contract model with reimbursement/commissioning organizations Identifying current contractual arrangements and assessing possibilities for valuebased contracting defining data standards and appropriate outcome measures Designing the valued-based payment framework	Funding •IT Staff Access to statistical data •Program managers •Decisionmakers •Alignment of local and national policymakers and local stakeholders •Training and technical assistance •IT systems

	Constructing the analytical model to execute the contract Establish a strong and inclusive governance structure to manage the implementation of the integrated care in the German speaking Community	

General description
In cooperation with the original Good Practice, OptiMedis, the Dienststelle aims to carry out a Feasibility study on the implementation of integrated care in the German speaking Community. The aim of the feasibility study is to develop a business plan which will guide the implementation of an integrated care in the German speaking Community. This business plan will include recommendations to the development of a model region of integrated care and a financing plan. Based on the results and recommendation of the feasibility study the Dienststelle in cooperation with the local stakeholders and local and national politics will implement the different core features from the OptiMedis Model considering the local specificities of the German speaking Community.
Local Core Feature 1
Feasibility study on the implementation of integrated care in the German speaking Community
Local Core Feature 2
Establish a shared savings contract model with the National Institute for Health and Disability Insurance
Local Core Feature 3
Establish a strong and inclusive governance structure to manage the implementation of the integrated care
Local Core Feature 4
Implementation of care programs

Local Action Plan

Local Good Practice	Establish a population based regional integrated care system in the German speaking Community of Belgium based on the OptiMedis model
Target population	**Setting**
The entire population of the German speaking Community 78.000 people	The Regional Health System of the German speaking Community
Main aim	

Establish a population based regional integrated care system in the German speaking Community of Belgium based on the Optimedis model and the Quadruple AIM and considers the regional specificities of the German speaking Community
General description
In cooperation with the original Good Practice, OptiMedis, the Dienststelle aims to carry out a Feasibility study on the implementation of integrated care in the German speaking Community. The aim of the feasibility study is to develop a business plan which will guide the implementation of an integrated care in the German speaking Community. This business plan will include recommendations to the development of a model region of integrated care and a financing plan. Based on the results and recommendation of the feasibility study the Dienststelle in cooperation with the local stakeholders and local and national politics will create the conditions and the framework to implement an integrated care model in the German speaking Community in the future.

Related original Good Practices and their Core Feature (s)	Optimedis oGP: CF 1.1, 1.2, 1.3, 1.4, 2.1, 2.2., 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 4.3, 4.4, 5.1, 5.2, 5.3, 6.1, 6.2 and 6.3
Local Core Feature 1	Feasibility study on the implementation of integrated care in the German speaking Community

SMART objective
By the begin of 2022 the Dienststelle in cooperation with OptiMedis will have performed a Feasibility study on the implementation of integrated care in the German speaking Community. The timeline for the feasibility study Is from July to December 2021.

Activities	Actors	Resources	Setting(s)	Timeline	Key Performance Indicators
• Mission and goal clarification	• Experts from the Dienststelle • Experts from Optimedis	• Experts attending the meeting	• The Regional Health System of the German speaking Community	• 1 Kick-Off Meeting and if needed meetings to update the mission and goals	• Clearly defined the mission and goals of the study • Clearly define the roles and expectations of the different actors
• Secondary data analysis	• Project Manager • Health Data analyst • Sickness funds	• Access to statistical data from the insurance companies	• The Regional Health System of the German speaking	• In the framework of the study, which is expected to last 6 months	• The statistical data will be analysed and, on this basis, the current situation of the region and the

		• Eventually financial resources to get access to the statistical data • Access to Health studies about the region already performed	Community		potential efficiency gains and optimalisation in the quality of care will be analysed.
• Primary data analysis	• Project Manager • Health Data analyst • GP and nursing • Hospital staff • Pharmacists • National Institute for Health and Disability Insurance • Political stakeholders • Other stakeholders from the NAWG	• Perform interviews of stakeholders • Travel expenses and human resources to perform the interviews	• The Regional Health System of the German speaking Community	• In the framework of the study, which is expected to last 6 months	• Assess the situation of the healthcare structures and sector and the willingness to invest in the integrated care initiatives
• Organisation of Regional Health Conference	• Project Manager • Experts from OptiMedis and	• Expenses to organise a meeting ex: room rent	• The Regional Health System of the German	• One or if needed several meetings with the different stakeholders in the region withing the	• Discussion and presentation of the results of the first analysis with

	the Dienststelle • GPs and nursing • Hospital Staff • Sickness insurances • Patient representatives or patients interest groups • Local authorities and politics • Other local stakeholders that might be relevant		speaking Community	timeframe of the study	the regional stakeholders
• Development of a business plan	• Project Manager • OptiMedis • Dienststelle • Local politics • Other regional stakeholders	• The development of the business plan and the feasibility study will cost around 85.000€	• The Regional Health System of the German speaking Community	• In the framework of the study, which is expected to last 6 months	• A business plan including a financing plan has been developed
Local Core Feature 2	Establish a shared savings contract model with the National Institute for Health and Disability Insurance				
SMART objective					
By the end of 2022 a shared saving contract model has been negotiated with National Institute for Health and Disability insurance and the legal basis has been laid down to implement this model. The timeline for this action is January to December 2022.					
Activities	**Actors**	**Resources**	**Setting(s)**	**Timeline**	**Key Performance Indicators**

• Develop a shared savings contract model which fits in the Belgium regulatory context and also meets the international best practices requirements of shared-savings contract models.	• Dienststelle • National Institute for Health and Disability Insurance • Sickness funds • National Health Minister and Ministry • Regional Health Minister • Law specialist • Health data analyst • Statistics experts	• Financial resources to allow to implement the shared saving model • Access to Health data to analyse and evaluate the shared saving model	• The Regional Health System of the German speaking Community	• From Begin till end of 2022: Based on the findings of the feasibility the Dienststelle will undergo discussion with the National Institute for Health and Disability Insurance and the Regional and Federal Political level to establish a shared savings model.	• A legal and regulatory framework has been established. • This framework meets the international best practices requirements of shared savings contract models

Local Core Feature 3	Establish a strong and inclusive governance structure to manage the implementation of the integrated care in the German speaking Community

SMART objective

By the end of 2022 a strong and inclusive governance structure to manage the implementation of the integrated care in the German speaking Community will be established. The timeline for this action last from February to December 2022. But it is dependent on the negotiation concerning the establishment of the shared saving contract model.

Activities	Actors	Resources	Setting(s)	Timeline	Key Performance Indicators
• Establish a strong efficient and coherent Governance structure	• All stakeholders of the NAWG • Legal specialist	• Stakeholder meetings • Legal framework to establish	• The Regional Health System of the German speaking	• By the end of 2022 based on the findings and recommendations of the Feasibility study a Governance structure that is efficient and consistent with the	• A Governance structure with a clear legal framework has been established and the role of every partner

	• Local authorities and politics	the Governance structure • Financial retribution of the participants for participating on the stakeholder meetings	Community	regional stakeholder structure	is clearly defined

Local Core Feature 4	Implementation of test care program
SMART objective	
By the end of 2022 a first care program will be tested with a limited number of patients and limited number of actors. Before such a care program can be implemented the core feature 2 and 3 must fulfilled. In the end of 2022 November- December 2022 earliest timeline possible.	

Activities	**Actors**	**Resources**	**Setting(s)**	**Timeline**	**Key Performance Indicators**
• Implement a first test care program on the basis on findings of the feasibility study	• All stakeholders of the NAWG • Especially GP and hospitals • Legal specialist	• Stakeholder meetings • Define the content of care program • Financial retribution of the participants for participating on the stakeholder meetings	• The Regional Health System of the German speaking Community • Limited number of patients to be defined with the stakeholders	• By the end of 2022 based on the findings and recommendations of the Feasibility study a first test care program with a limited range and limited group of patients can be implemented to test a integrated care program	• A care program could be tested and delivered first evidence and best practices that enable the NAWG to implement structurally the integrated care model an programs in the German speaking Community

Implementation

1st PDSA Cycle

Plan

LCF1	Concept Development for the implementation of integrated care in the German speaking Community East Belgium							
Activities (from the LAP)	**Actions**	**Actors**	**Time-line**	**KPIs MEASURE**				
				KPIs (from the LAP)	Who will collect the data?	When will the data be collected?	How will the data be collected?	Target value
Mission and goal clarification	Kick Off meeting	DSL and Opti-Medis	Sept to Oct 2021	Clearly defined the mission and goals of the study Clearly define the roles and expectations of the different actors	Opti-Medis	September 2021	Minutes of the meeting	The mission and goals of the study as well as the roles and expectations of the different actors have been clearly defined.
Secondary data analysis	Evaluate Health insurance data based on a set of agreed criteria	OM, DSL	Sept – Dec. 2021	The statistical data will be analysed and, on this basis, the current situation of the region and the potential efficiency gains and optimalisation in the quality of care will be analysed	DSL provides data, OM does analysis	analysis completed by Dec 2021	analytical report	The statistical data have been analysed and, on this basis, the current situation of the region and the potential efficiency gains and optimalisation in the quality of care are analysed
Primary data analysis	conduct stakeholder interviews	OM	Sept – Dec 2021	Assess the situation of the healthcare structures and sector and the willingness to invest in the integrated care initiatives	OM and DSL conduct interviews	Dec 2021	as part of final report	The situation of the healthcare structures and sector and the willingness to invest in the integrated care initiatives have been assessed

Recommendations for integrated care in East Belgium is developed	recommendations based on analysis developed	OM, review DSL	Dec 21 to Feb 22	Set of recommendations and priorities for integrated care in East Belgium	OM	recommendations available Feb 22	preliminary report and part of final rep	preliminary report available
Concept note and business plan for regional integrator company	Develop concept note and business plan for local integrator	OM	Jan - April 2022	The final report including concept note and business plan is submitted	OM	April 22	report	report available
Concept note and business plan for regional integrator company	develop implementation plan for integrated care in East Belgium	OM, DSL, stakeholders	April-June 22	An agreed implementation plan is available	OM	June 22	action plan	plan available

Do

Cycle number (1)	**1**	
Activity	**KPI**	**Actual value**
Mission and goal clarification	-Clearly defined the mission and goals of the study -Clearly define the roles and expectations of the different actors	The mission and goals of the study as well as the roles and expectations of the different actors have been clearly defined. 100%
Secondary data analysis	The statistical data will be analysed and, on this basis, the current situation of the region and the potential efficiency gains and optimalisation in the quality of care will be analysed	The IMA data set are aggregated data. So Optimedis and the DSL contacted the federal ministry of Health to get hospitalisation and cost data, but these data are also only aggregated data. >25%
Primary data analysis	Assess the situation of the healthcare structures and sector and the willingness to invest in the integrated care initiatives	Based on stakeholder interviews performed in the frame of a site visit in the end of September and subsequent stakeholder interviews through video conferences a set of primary date is collected 100%
Recommendations for integrated care in East Belgium is developed	Set of recommendations and priorities for integrated care in East Belgium	Based on the analysis of primary and secondary data, recommendations for the development of integrated care in East Belgium are formulated and shared 50%
Concept note and business plan for regional integrator company	The final report including concept note and business plan is submitted	Following the review of recommendations and discussions at high level discussion amongst Belgium stakeholders the final report and concept note including the business plan for setting up a regional integrator entity is available 10%
Implementation Plan for integrated care East Belgium developed	An agreed implementation plan is available	Not yet done

QUESTIONS	**ANSWERS**
What was actually implemented? Any deviation from the planned actions	An intermediate report from December 2021 reports the first intermediate findings mainly based on the stakeholder interviews and the literature review. The analysis of primary data was completed in December 2021. A limited analysis of secondary data has been done and made available.

Problems? Unexpected findings? Please describe	Lack of individualised pseudonymised data limits the scope analysis and the researcher are confronted with limitation of data availability a so the expected results have not yet been reached. Currently efforts are undertaken to access individualised data from national databases. High ranking consultations are undertaken to decide on the continuation and options for the implementation

IMPLEMENTATION PROGRESS OF THE LOCAL GOOD PRACTICE			
0-25%	**25-50%**	**50-75%**	**75-100%**
	X		

Study

Cycle number (1)		**1**				
Activity	**KPI**	**Target value (from PLAN)**	**Actual value (from DO)**	**Reasons for the deviations**	**Mitigation actions implemented**	**Impact of mitigation actions**
Mission and goal clarification	Clearly defined the mission and goals of the study Clearly define the roles and expectations of the different actors	The mission and goals of the study as well as the roles and expectations of the different actors have been clearly defined.	The mission and goals of the study as well as the roles and expectations of the different actors have been clearly defined.	/none	/	/
Secondary data analysis	The statistical data will be analysed and, on this basis, the current situation of the region and the potential efficiency gains and optimalisation in the quality of care will be analysed	The statistical data have been analysed and, on this basis, the current situation of the region and the potential efficiency gains and optimalisation in the quality of care are analysed	The aggregated data sets we got from the IMA and the Federal Health Ministry only allows limited analysis. These data do not allow an analysis in depth.	Only aggregated data were provided by IMA and the Federal Health Ministry. These data do not allow an analysis in depth.	The project coordinators are planning to submit a request to the committee for security of information to be allowed to get access to individualised pseudonymised data from different Datawarehouse's and data sources to be able to cross these data. The request is currently set up and	Not yet submitted the request

					will be submitted as soon as possible.	
Primary data analysis	Assess the situation of the healthcare structures and sector and the willingness to invest in the integrated care initiatives	The situation of the healthcare structures and sector and the willingness to invest in the integrated care initiatives have been assessed	*Based on a first range of stakeholder interviews of September 21 and subsequent video conferences first findings and recommendations concerning the development of integrated care in East Belgium have been formulated*	Neither GP's nor pharmacists could be present for the first range of interviews. Also it was subsequent interviews were conducted by video calls The interview with a member of the cabinet of the Federal Health Minister has taken place Outstanding interviews are with director and staff members of the Hospital of Eupen The project coordinators also felt that an interview with officials of the National Institute for Health and Disability Insurance	In the meantime, an interview with 2 coordinator of the Team is awaiting the results of discussions between the East Belgium Minister of Health and his federal colleague planed for February 22. The need for further interviews will be decided afterwards .	Thanks to interviews the project coordinators got a better inside in the regional and Belgian health sector for example concerning the concept of medical houses and the related lump sum system, Results of inter-ministerial consultations are awaited

Recommendations for integrated care in East Belgium is developed	Set of recommendations and priorities for integrated care in East Belgium	preliminary report available	*Preliminary report available, based on primary data analysis only*	Currently no access to individualised data for secondary data analysis	Request for access to individualised data under preparation	Rethink the need for individualised data for further steps.
Concept note and business plan for regional integrator company	The final report including concept note and business plan is submitted	report available	*Not yet due*			
Implementation Plan for integrated care East Belgium developed	An agreed implementation plan is available	plan available	*Not yet due*			

Act

Cycle number (1 or 2)	**1**		
Activity	**Maintain**	**Adapt**	**Abandon**
Mission and goal clarification	X		
Secondary data analysis		Submit request to the committee for security of information to get access to individualised pseudonymised data, need to think whether this is needed for further steps and if it could be done at a later step in cycle 2	
Primary data analysis	X	Further interviews with stakeholder ex: Hospital Eupen	
Recommendations for integrated care in East Belgium is developed	X	Preliminary recommendations available	

Concept note and business plan for regional integrator company	X		
Concept note and business plan for regional integrator company	X		

QUESTIONS	ANSWERS
Any new proposed action for the future?	The analysis of individualised health insurance data might not be feasible in the first PDSA cycle. If the subsequent steps for cycle 1 are considered feasible without this data, the implementation can continue as planned.

2nd PDSA Cycle

Plan

	Concept Development for the implementation of integrated care in the German speaking Community East Belgium							
Activities (from the LAP)	**Actions**	**Actors**	**Time-line**	**KPIs MEASURE**				
				KPIs (from the LAP)	Who will collect the data?	When will the data be collected?	How will the data be collected?	Target value
Primary data analysis	Complement with focus groups, define topics	OM	Sept – Dec 2022	Assess the situation of the healthcare structures and sector and the willingness to invest in the integrated care initiatives	OM and DSL conduct interviews	Nov-Dec 22	Focus groups	The situation of the healthcare structures and sector and the willingness to invest in the integrated care initiatives have been assessed
Recommendations for integrated care in East Belgium is developed	Update from draft report	OM, review DSL	Dec 22 to Feb 23	Set of recommendations and priorities for integrated care in East Belgium	OM	recommendations available Dec 22	preliminary report and part of final rep	Final report available
Concept note and business plan for regional integrator company	Update draft concept	OM	Jan 23	The final report including concept note and business plan is submitted	OM	Nov-Dec 22	report	report available
Implementation Plan for integrated care East Belgium developed	develop implementation plan for integrated care in East Belgium	OM, DSL, stakeholders	April 23	An agreed implementation plan is available	OM	April 23	action plan	plan available

Do

Cycle number	**2**	
Activity	**KPI**	**Actual value**
Primary data analysis	Assess the situation of the healthcare structures and sector and the willingness to invest in the integrated care initiatives	Done – secondary data analysis completed, focus group discussions done in December 2022
Recommendations for integrated care in East Belgium is developed	Set of recommendations and priorities for integrated care in East Belgium	Report submitted; Validation with Ministry planned in January 2023
Concept note and business plan for regional integrator company	The final report including concept note and business plan is submitted	Draft as part of the evaluation report. Concrete structure for regional integrator needs to be developed following the general agreement with regional and national governments – planned for 1 QT 2023
Implementation Plan for integrated care East Belgium developed	An agreed implementation plan is available	Not available

QUESTIONS	**ANSWERS**
What was actually implemented? Any deviation from the planned actions	Analysis of potentials and focus group discussions have been done. Many discussions with local actors on implementation options. Results not validated yet with regional and national authorities.
Problems? Unexpected findings? Please describe	Approval process takes time, the federal structure of the Belgian health system makes joint decisions complex, in the meantime the originally local practice has been “upgraded” to a potential reference case for the national level.

IMPLEMENTATION PROGRESS OF THE LOCAL GOOD PRACTICE			
0-25%	**25-50%**	**50-75%**	**75-100%**
			X

Study

Cycle number (1)		PDSA 2				
Activity	**KPI**	**Target value (from PLAN)**	**Actual value (from DO)**	**Reasons for the deviations**	**Mitigation actions implemented**	**Impact of mitigation actions**
Primary data analysis	Assess the situation of the healthcare structures and sector and the willingness to invest in the integrated care initiatives	the situation of the healthcare structures and sector and the willingness to invest in the integrated care initiatives have been assessed	*Done – secondary data analysis completed, focus group discussions done in December 2022*	none		
Recommendations for integrated care in East Belgium is developed	Set of recommendations and priorities for integrated care in East Belgium	preliminary report available	*Report submitted; Validation with Ministry planned in January 2023*	Validation process at various levels takes time	Continued consultations	
Concept note and business plan for regional integrator company	The final report including concept note and business plan is submitted	report available	*Draft as part of the evaluation report. Concrete structure for regional integrator needs to be developed following the general agreement with regional and national governments – planned for 1 QT 2023*	Validation process at various levels takes time	none	
Implementation Plan for integrated care East Belgium developed	An agreed implementation plan is available	plan available	*Not available*	Will be developed after the validation process – planned for 2nd quarter 2023		

Act

Cycle number (1 or 2)	PDSA 2		
Activity	**Maintain**	**Adapt**	**Abandon**
Primary data analysis	X		
Recommendations for integrated care in East Belgium is developed	X		
Concept note and business plan for regional integrator company	X		
Implementation Plan for integrated care East Belgium developed	X		

QUESTIONS	ANSWERS
Any new proposed action for the future?	The following topics should be part of the sustainability strategy: Validation of report and suggested approach, setting up territorial integrator structure, setting up access to data, further develop secondary and tertiary prevention, developing “health programs” and validated patient pathways for chronic care patients, strengthen local networks of health professionals, medico-social workers, communities and preventive care providers, possible setting up of shared savings contract.

Post-implementation

ITEM	ANSWER
Title and Abstract	
Title	Dienststelle für Selbstbestimmtes Leben
Abstract	In the frame of the implementation of the sixth state reform in Belgium The Office of the German-speaking Community for self-determined living (Dienststelle für Selbstbestimmtes Leben) was established by a decree of 13th December 2016 from the German-speaking Community as a public interest organization financed by the German-speaking Community. With the decree of 13 December 2016 on the creation of an Office of the German-speaking Community for Self-determined Living , a new chapter has been opened in the shaping of autonomy in the German-speaking Community and a course has been set for the future - particularly in the areas of social affairs and senior citizens, but also in employment and the health sector. This decree regulates the counselling and support of people, giving them the chance to develop themselves, to realise themselves and to give shape to their lives in a self-determined way. People's need for support varies here depending on the person. They are: - People who are prevented from participating in society due to an impairment - and regardless of age - and who claim a need for support. - Persons who claim a need for support because of their age. - - Friends, neighbours, and relatives of these persons who fulfil an important role in supporting the above-mentioned persons.
Why did you start?	**Answer**
Problem description	In general, it can be said that the health policy aspects of preventive and curative medicine are the responsibility of the Communities. Certain aspects may sometimes also be the responsibility of the regions. Large areas of public health concern, for example all aspects related to health care and medication, sickness and disability insurance or food control, are the responsibility of the federal authorities. Belgian federalism and its asymmetries explain, for the most part, the complex fragmentation of the competences. and the high number of stakeholders currently involved in health management in the broadest sense. The fragmentation of competences is one of the main characteristics of Belgian federalism. A competence rarely resides in its totality in the hands of one entity, many areas are distributed either between the different entities of the same level of power (the three Communities, for example), or even between different levels of power. This complexity is a major challenge for the sustainability and efficiency of the healthcare system in Belgium. Besides, Health care, especially in a rural to semi-urban region such as the German-speaking Community, is facing major challenges that can no longer be solved simply by continuing previous practices but must be tackled anticipatively through innovative concepts. What effects will the looming and in parts already existing shortage of skilled workers, the ageing of the population, the increased incidence of not only chronic diseases and the technical developments in the medical field have on the health status of the people, on health care and on its affordability? Will the

	necessary health services be available in German and close to home? How can a health system be built, framed, and supported that can cope with these demands? Consequently, the goal must also be to bring about a paradigm shift in health policy - from care to self-determination and equality.
Available knowledge	See description above Sources: - -Maertens de Noordhout Charline, Devos Carl, Adriaenssens Jef, Bouckaert Nicolas, Ricour Céline, Gerkens Sophie. Health system performance assessment: care for people living with chronic conditions. Health Services Research (HSR). Brussels. Belgian Health Care Knowledge Centre (KCE). 2022. KCE Reports 352. D/2022/10.273/17. - Lambert Anne-Sophie, Op de Beeck Susanne, Herbaux Denis, Macq Jean, Rappe Pauline, Schmitz Olivier, Schoonvaere Quentin, Van Innis Anna Luisa, Vandenbroeck Philippe, De Groote Jesse, Schoonaert Lies, Vercruysse Helen, Vlaemynck Marieke, Bourgeois Jolyce, Lefèvre Mélanie, Van den Heede Koen, Benahmed Nadia. Towards integrated care in Belgium: stakeholders' view on maturity and avenues for further development. Health Services Research (HSR). Brussels. Belgian Health Care Knowledge Centre (KCE). 2022. KCE Reports 359. DOI: 10.57598/R359C. - Devos Carl, Cordon Audrey, Lefèvre Mélanie, Obyn Caroline, Renard Françoise, Bouckaert Nicolas, Gerkens Sophie, Maertens de Noordhout Charline, Devleesschauwer Brecht, Haelterman Margareta, Léonard Christian, Meeus Pascal. Performance of the Belgian health system – Report 2019. Health Services Research (HSR). Brussels. Belgian Health Care Knowledge Centre (KCE). 2019. KCE Reports 313. - Paulus D, Van den Heede K, Gerkens S, Desomer A, Mertens R. Development of a national position paper for chronic care: example of Belgium. Health policy. 2013; https://doi.org/10.1016/j.healthpol.2013.04.010. - Gerkens S, Merkur S. Belgium: Health system review. Health Systems in Transition, 2020; 22(5): pp.i–237. - Plan conjoint en faveur des malades chroniques Des soins intégrés pour une meilleure santé https://www.integreo.be/sites/default/files/public/content/plan_fr.pdf - Garantie budgétaire et gains d'efficience du Plan Soins intégrés Choix et recommandations pour le modèle de calcul, AIM – Agence Intermutualiste Dr Karen Geurts El Maâti Allaoui En collaboration avec Prof. Erik Schokkaert Dr Marc Bruijnzeels Prof. Catherine Dehon Traduction : Jérôme Paque À la demande du SPF Santé publique, Sécurité de la Chaîne alimentaire et Environnement Et de l'Institut national d'assurance maladie-invalidité Bruxelles, 2019 https://aim-ima.be/IMG/pdf/200303_rapport_garantie_budgetaire._choix_et_recommandations_pour_le_modele_de_calcul_1_.pdf

	- Seniorenpolitisches Gesamtkonzept für die Deutschsprachige Gemeinschaft, https://ostbelgienlive.be/PortalData/2/Resources/downloads/senioren/Seniorenpol_Gesamtkonzept_2014_180214_KORR_5_kl_2.pdf
Rationale	In the field of integrated care the office acted as regional integrator of a pilot project called “Gesundes Ostbelgien“ from September 2016 to March 2018 within the framework of a federal call for regional projects of integrated care. This pilot project, which included 54 partners from the health, social and sport sector of the German-speaking Community was initially validated by the Belgian federal authorities in December 2017 but had to be discontinued due to legal and administrative problems before it could be implemented. In its government declaration of 21 September 2020, the Government of the German-speaking Community announced that it wanted to relaunch the integrated care project "Gesundes Ostbelgien" in the German-speaking Community. -The DSL closely work together with OptiMedis and based its assumptions on the best practices from the OptiMedis Model.
Specific aims	Establish a population based regional integrated care system in the German speaking Community of Belgium based on the OptiMedis model and the Quadruple AIM and considers the regional specificities of the German speaking Community
What did you do?	**Answer**
Context	- Lack of data on the influence of the systematized application of individualized and comprehensive care plans to complex chronic patients in their general health status - -Need to improve the disease self-management by patient and their caregivers - Unresolved continuity of care between care levels (inter/intra level) - Lack of coordination between healthcare and social services - -Build an integrated care model that can one the hand achieve Quadruple (or Quintuple) AIM and on the other hand be in conformity with Belgian Federal legislation. - Lack of health data in the region. Increase the availability of heath data to achieve a data health management and a better matching between the needs and offers in the region. - - Lack of human resources especially qualified health personnel. Situation is getting worse due to the ageing of GPs for example and the competition with other neighbouring regions to attract this kind of qualified heath personnel
Intervention(s)	The entire population of the region around 78.000 people Director of DSL, Project coordinator DSL, Vice Chairman OptiMedis, Project Coordinator OptiMedis Regional Health Minister and Regional Ministry representatives, representatives of different Sickness funds in the region, Hospital staff and director, Home aid and home nursing, Sport association, pharmacists, GPs

Study of the Intervention(s)	- Assess the situation of the healthcare structures and sector and the willingness to invest in the integrated care initiatives based on a primary data analysis included in a feasibility study report - -Perform a secondary data analysis based on the available data included in a feasibility study report - Set of recommendations and priorities for integrated care in East Belgium included in a feasibility study report - -Develop a Concept note and business plan for regional integrator company included in a feasibility study report - Develop an Implementation Plan for integrated care East Belgium - By the end of 2022 the feasibility study performed with OptiMedis will be available. - -By the end of JADECARE the German speaking Community will have reached all conditions and all components to fully implement an integrated care model based on the OptiMedis model in the region
Measures	- -Clearly defined the mission and goals of the study - -Clearly define the roles and expectations of the different actors - -Assess the situation of the healthcare structures and sector and the willingness to invest in the integrated care initiatives based on a primary data analysis included in a feasibility study report - -Perform a secondary data analysis based on available data included in a feasibility study report - The statistical data will be analysed and, on this basis, the current situation of the region and the potential efficiency gains and optimalisation in the quality of care will be analysed. - Set of recommendations and priorities for integrated care in East Belgium included in a feasibility study report - Develop a Concept note and business plan for regional integrator company included in a feasibility study report - Develop an Implementation Plan for integrated care East Belgium - Discussion and presentation of the results of the first analysis with the regional stakeholders - A legal and regulatory framework has been established. - -This framework meets the international best practices requirements of shared savings contract model. - -A Governance structure with a clear legal framework has been established and the role of every partner is clearly defined

	- -An electronic integrated system has been established In the region - -The IT integration has been improved and the potential IT gaps has been filled - -Develop Shared decision-making tools and self-management support - -Develop and use comprehensive health checks and health-related goals - Training sessions on incentives and tools to implement patient centred care will be provided for professionals - -Start to develop and/or use analyse tools and a performance dashboard to achieve the Triple Aim objectives base on reliable data
Analysis	Only aggregated data were provided by IMA and the Federal Health Ministry. These data do not allow an analysis in depth. Request for access to individualised data under preparation Neither GP's nor pharmacists could be present for the first range of interviews. Also, it was subsequent interviews were conducted by video calls. The interview with a member of the cabinet of the Federal Health Minister has taken place. Some stakeholders, which get an invitation to the focus group could not participate because time constraints or lack of human resources. But nevertheless, a broader inside in the healthcare structures of the region was achieved.
What did you find?	**Answer**
Results	Only aggregated data were provided by IMA and the Federal Health Ministry. These data do not allow an analysis in depth. Request for access to individualised data under preparation Organization of focus group discussions to have a broader view on the healthcare structures of the region. The following KPI were postponed after the implementation of JADECARE due to time constrains and political decision making constrains: A Governance structure with a clear legal framework has been established and the role of every partner is clearly defined. An electronic integrated system has been established In the region The IT integration has been improved and the potential IT gaps has been filled Develop Shared decision-making tools and self-management support-Develop and use comprehensive health checks and health-related goals

	Training sessions on incentives and tools to implement patient centred care will be provided for professionals Start to develop and/or use analyse tools and a performance dashboard to achieve the Triple Aim objectives base on reliable data Only aggregated data were provided by IMA and the Federal Health Ministry. These data do not allow an analysis in depth. Request for access to individualised data under preparation To implement some actions there was a need of political discussions taking place between the regional and federal level and these discussions took a long time, so some planned actions could not be performed in the timeframe of the JADECARE project.
What does it mean?	**Answer**
Summary	The feasibility study was performed and is available. Currently no access to individualised data for secondary data analysis. Request for access to individualised data under preparation. Rethink the need for individualised data for further steps. Approval process takes time, the federal structure of the Belgian health system makes joint decisions complex, in the meantime the originally local practice has been “upgraded” to a potential reference case for the national level.
Interpretation	Currently no access to individualised data for secondary data analysis Request for access to individualised data under preparation. Rethink the need for individualised data for further steps. Approval process takes time, the federal structure of the Belgian health system makes joint decisions complex, in the meantime the originally local practice has been “upgraded” to a potential reference case for the national level.
Limitations	The results of the feasibility studies are tailormade for the specific context of East Belgium. But these results could surely also be partly used for other projects and initiatives in Belgium. The used methods and analysis could be used in any project of the same kind.
Conclusions	Approval process takes time, the federal structure of the Belgian health system makes joint decisions complex, in the meantime the originally local practice has been “upgraded” to a potential reference case for the national level. Data availability is a crucial topic and can influence the outcomes and results of a study a lot. It is crucial to get an overview over the gap between available and needed data. The following topics should be part of the sustainability strategy: • Validation of report and suggested approach, • setting up territorial integrator structure,

	• setting up access to data, • further develop secondary and tertiary prevention, • developing “health programs” and validated patient pathways for chronic care patients, • strengthen local networks of health professionals, medico-social workers, communities and preventive care providers, • possible setting up of shared savings contract.
Other information	**Answer**
Funding	The Office of the German- speaking Community for self-determined living (Dienststelle für Selbstbestimmtes Leben) was established by a decree of 13th December 2016 from the German-speaking Community as a public interest organization financed by the German-speaking Community of Belgium.

The Health Insurance Institute of Slovenia (ZZZS)

Pre-implementation

Scope definition

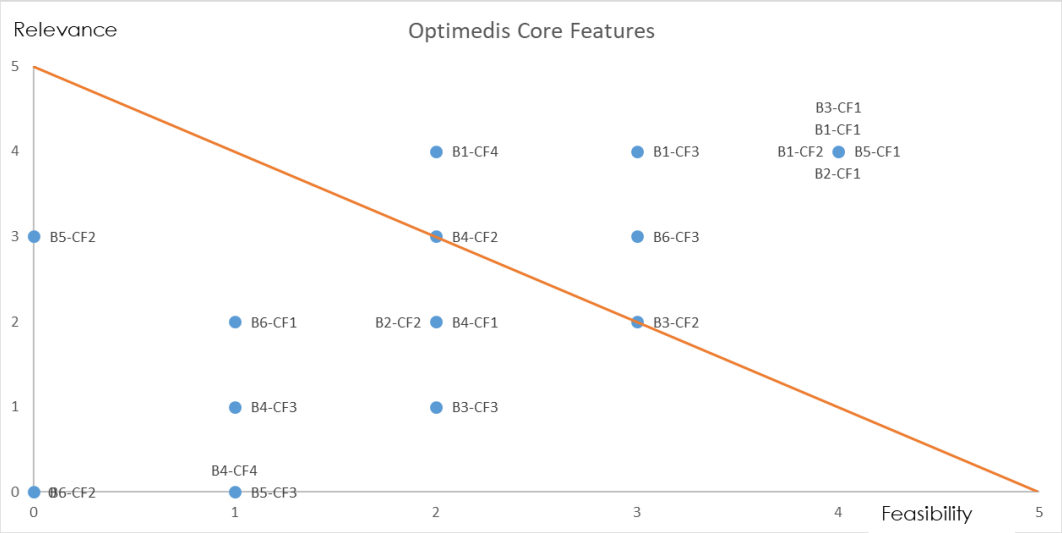
Identified and prioritized needs

Block	Needs (grouped)
B1 - Shared savings contract with reimbursement /commissioning organizations	Define a methodology for calculating savings and stakeholder sharing (3, 6, 9)
	Examination of the starting points for the contract between the stakeholders (1, 2, 4, 5, 7, 8)
B2 - A model including strong stakeholder engagement	Develop a clinical pathway (1, 2)
	Ensure the participation of all stakeholders and appoint a coordinator (3, 4, 5, 6, 7)
B3 - Electronic integration across providers	Data exchange (2, 3, 4, 5)
	Communication channels (1)
	Tools for doctors (6)
B4 - Patient involvement and empowerment	Patient education (1, 4, 6, 7, 8)
	Education and information tools (2, 6)
	Setting individual goals (3, 5)
	Self-care tools (6, 9, 10)
B5 - Data-driven management	Definition of indicators, planned data analysis… (2, 4)
	Establishment of a data system (1, 3, 5)
B6 – Prevention, health promotion and public health	Patient education (3)
	Individual programs (2)
	Prevention programs (1)

Assessment of Core Features

Core features			Relevance	Feasibility
B1 - Shared savings contract with reim-	CF1- identifying current contractual arrangements and assessing possibilities for value-based contracting	B1-CF1	4	4
	CF2- defining data standards and appropriate outcome measures	B1-CF2	4	4
	CF3- Designing the valued-based payment framework	B1-CF3	4	3
	CF4- Constructing the analytical model to execute the contract	B1-CF4	4	2
B2 - A	CF1- Identifying and liaising with stakeholder groups	B2-CF1	4	4

	CF2- Creating appropriate governance structures	B2-CF2	2	2
B3 - Electronic integration across provid-	CF1- Assessing state of current health IT integration and IT tools in use	B3-CF1	4	4
	CF2- Market assessment on tools adequate to improve IT connectivity of providers	B3-CF2	2	3
	CF3- Training with providers to assess incentives for IT deployment and usability assessment	B3-CF3	1	2
	CF4- Patient access to their data (Open Notes approach)	B3-CF4	0	0
B4 - Patient involvement and empowerment	CF1- Patient advisory boards	B4-CF1	2	2
	CF2- Shared-decision making tools and self-management support	B4-CF2	3	2
	CF3- Comprehensive health checks and health-related goals	B4-CF3	1	1
	CF4- Providing training on incentives and tools to implement patient centered care	B4-CF4	0	1
B5 - Data-driven man-	CF1- Potential analysis tool	B5-CF1	4	4
	CF2- Performance dashboards	B5-CF2	3	0
	CF3- FORTA tool to identify over- and underutilization regarding prescriptions	B5-CF3	0	1
B6 – Prevention,	CF1- Individual treatment plans and care programmes	B6-CF1	2	1
	CF2- Care planning based on Chronic care model	B6-CF2	0	0
	CF3- Patient coaching	B6-CF3	3	3



Final Core Features selected

Block	Needs (prioritized)
B1 - Shared savings contract with reimbursement/commissioning organizations	- CF1- identifying current contractual arrangements and assessing possibilities for value-based contracting - CF2- defining data standards and appropriate outcome measures - CF3- Designing the valued-based payment framework - CF4- Constructing the analytical model to execute the contract
B2 - A model including strong stakeholder engagement	- CF1- Identifying and liaising with stakeholder groups
B3 - Electronic integration across providers	- CF1- Assessing state of current health IT integration and IT tools in use - CF2- Market assessment on tools adequate to improve IT connectivity of providers
B4 - Patient involvement and empowerment	- CF2- Shared-decision making tools and self-management support
B5 - Data-driven management	- CF1- Potential analysis tool
B6 – Prevention, health promotion and public health	- CF3- Patient coaching

Situation analysis

	STRENGTHS	WEAKNESSES
INTERNAL	**General strengths:** - NAWG brings together experts from all relevant fields to introduce the Optimedis oGP in the field of nephrology (nephrologists, experts in payment models) - Existence of good practices in the field of innovative payment models (Optimedis) that we will use - Participation in JA JADECARE - The small size of our country and individual institutions **Strengths of ZZZS:** - We are a quickly responsive group of experts (Field of Analytics and Development) with a good knowledge of payment models (current in Slovenia) - We have established links at other institutions that are crucial in the introduction of good practice (NIJZ, Slovenian Nephrological Society…) - Qualified team for working with data and BI tools - We have a lot of data on performed and payed health services (form billing data) **Strengths of primary health care:** - Good organization of primary health care in terms of preventive activities; - Already established organization of detection and management of individual chronic diseases at the primary level: specially trained graduate nurse within the family doctor's clinic; - Already established organization of educational workshops for a healthy lifestyle and certain chronic diseases: Health Education Centers, Health Promotion Centers; - Good access to nephrology specialists - Willingness to cooperate with secondary / tertiary health care **Strengths of nephrology specialist activity:** - Proactivity of nephrologists - Highly professional, interested and self-initiated working group for CKD at the Slovenian Nephrological Society. - Existence of good practices in the field of connection between primary health care and nephrology specialist, new approach to the treatment of persons with	**Weaknesses of ZZZS:** - A small group of internal experts primarily engaged in other tasks - Lack of initial financial resources (to launch the Optimedis model) - We do not have yet established management based on data (analyzes, business indicators, quality indicators…) for the field of CKD - No connection to other (non-billing) data **Weaknesses of primary health care:** - Poor opportunities for structured communication between a family doctor and a specialist nephrologist - Preventive check-up programs in reference clinics do not include searching for patients with CKD

	CKD, especially in the field of monitoring of patients and education of patients **Strengths of patient groups:** - Kidney patients are well organized in the patient society - The existence of many educational materials - Patients' interest in innovations in the field of prevention and education	**Weaknesses of nephrology specialist activity:** - The contracts with ZZZS do not define clear teams for the field of specialist nephrology treatment (they only operate within specialist internal medicine clinics) - Outdated payment model: there are no built-in incentives for the implementation of education and diet therapy, which is necessary for the empowerment of people with CKD.
EXTERNAL	**OPPORTUNITIES**	**THREATS**
	- Existing program: New model of medical treatment of people with CKD, prepared by the Slovenian Nephrological Society - Well organised and active associations of patients with CKD - The number of newly diagnosed patients with CKD is steadily increasing due to greater awareness of the profession and lay people and the establishment of reference clinics, and the number of referrals to the secondary and tertiary level is also increasing. - Existence of individual IT solutions - Existence of an interoperable spine (but only in one direction - from the secondary / tertiary to the primary level)	- The increase in the number of patients with CKD, while working conditions and treatment at the secondary and tertiary levels remained unchanged - Rising costs for the treatment of patients with CKD - Lack of a national strategy for the management of CKD (such as exists for diabetes, cancer) - Poorly connected levels of health care (primary, secondary) - Poor data transfer between different levels of health care (only in one direction - from secondary / tertiary to primary level) - The use of existing IT tools is not widespread enough - Lack of a register of patients with CKD. - Changes in payment models are limited by existing legislation, the General Agreement and the resources available. - Team expansions at the specialist level require additional funding.

		- The unacceptability of the new model among the partners of the General Agreement

Strategic Intervention Areas

QUESTIONS	ANSWERS
Any new proposed action for the future?	The analysis of individualised health insurance data might not be feasible in the first PDSA cycle. If the subsequent steps for cycle 1 are considered feasible without this data, the implementation can continue as planned.

Definition of the LGP and LAP

Local Good Practice

Local Good Practice	Improvement in integration of health information system; and patient empowerment
Target population	**Setting(s)**
360.000 adults	Primary Healthcare centres in two Belgrade municipalities pilot project sites: PHC „Zemun“, PHC „Novi Beograd“ Gerontology Centre „Beograd“(social care institution in Belgrade with primary healthcare service providing).

Main aim

Improving health care in order to provide affordable, efficient, quality services with a sustainable continuity in their provision in the area of prevention and treatment of persons suffering from chronic diseases, and in accordance with their needs.

Outcomes	**Local Core Features and their Components**	**Inputs**
• Providing more efficient healthcare services • Providing health services through the accomplishment of communication between GPs and specialists • Contribute to process for achieving sustainable continuity of healthcare providing for persons suffering from chronic diseases. • improvement of E-health portal with access to information relevant for health care	**Improvement in integration of health information system** • Developed E-health record • Ensure the conditions for establishing communication channels between health professionals on primary and hospital/clinical level **Patient empowerment through E health portal upgrade** • Portal E-health put in place • Ensure the setting for personalized access	• Funding • Working team • IT Staff • Decision makers • Training and technical assistance • IT infrastructure • IT Vendor

General description

Aging and increase in prevalence of non-communicable diseases lead to a greater need for long-term care and optimization of the entire health care system. Introduction of digital communication between health care workers at all levels of health care should make the healthcare services more efficient and patients more satisfied. Improvements in coordination between health providers should contribute to continual health care

and better quality of patient care. Deployment of relevant web based health -information and access to them can strengthen patient capacity to recognize disease and manage their own health. Regulation on introduction of new services in the nomenclature of health services financed by state budget, financial resources limitations, organizational issues in healthcare institutions, as well as established patient access to health care which are difficult to change can influence the implementation and expected outcomes.
Local Core Feature 1
Improvement in integration of health information system
Local Core Feature 2
Patient empowerment through E health portal upgrade which will be used for patient access to information relevant for health management

Local Action Plan

Local Good Practice	Integrated care in nephrology
Target population	**Settings**
The number of registered persons in the participating family clinics is: 5,386 For preventive screening, those older than 30 years are eligible: 4,589 Approximately 10% are patients at high risk for CKD	At the primary level: • Ljubljana Health Center, family medicine clinic of Primož Štular MD • Sava med, family medicine clinic of Vojislav Ivetić MD • ZD Slovenj Gradec, family medicine clinic of Tina Virtič MD • ZD Nova Gorica, family medicine clinic of Matjaž Divjak MD At the secondary level: • General hospital Slovenj Gradec • University clinical center Ljubljana • General hospital Šempeter pri Gorici • University clinical center Maribor Health insurance institute of Slovenia
Main aim	
• Improving the health of the population (preventive activities and disease prevention, prolonging the quality of life of patients with CKD (QALY - quality-adjusted life-year), maintaining work capacity and social inclusion, slowing down the progression of CKD), • Well-empowered patients, • Long-term savings (in hospitalizations (less and shorter), in the use of erythropoietin, in delayed dialysis).	

Outcomes	**Local Core Features and their Components**	**Inputs**
• Effective communication of health care providers at various levels	• New model of communication between health care	• Experts in nephrology and family medicine and graduate nurses

• Prepared bases for population screening for CKD in family clinic
• Educated and empowered patients
• Prepared bases for setting up the analytical / payment model
	providers at different levels (LCF 1)
	  • Definition of criteria for the transition of patients from the primary to the secondary level
	  • Patient data exchange tools (e-medical record, e-consultations)
	• Population screening (LCF 2)
	  • Clinical pathway for early detection of CKD
	• Patient coaching (LCF 3)
	  • Educational materials for patients
	  • Educational materials for educators
	• Payment model (LCF 4)
	  • Review of existing contracts
	  • Review of existing services
	  • Preparation of a proposal for a new payment model
	  • Proposal for the charging for educational services
		• Financial resources to pay for these experts
		• Financial resources for educational materials
		• Experts in the field of payment models
		• Financial resources for laboratory tests

General description

Our long-term quadruple goal is: to improve the health of the population in the field of CKD, increase the satisfaction and empowerment of patients with CKD, increase the satisfaction of health professionals with new education and prevention options and save money on hospitalizations, drugs and dialysis. These are the goals we are striving for in the next few years. However, as time and financial resources within JADECARE are limited, the available resources will focus mainly on the preparation of starting points for improving communication between the primary and secondary level, for improving preventive activities in the field of CKD, for billing new services (especially educational) in the field of CKD. We will prepare new educational materials to increase the empowerment of patients. To ensure the success of our activities, we have included all interested parties in the NAWG (family physicians, nephrology specialists, payment model experts, nephrology patients' association). We will also invite experts from the field of family medicine reference clinics and e-Medical record from the Public health institute to participate in the planned activities to ensuring sustainability use of the proposed solutions.

Local Core Feature 1
New model of communication between health care providers at different levels
Local Core Feature 2
Population screening
Local Core Feature 3
Patient coaching
Local Core Feature 4
Payment model

Local Good Practice	Integrated care in nephrology
Target population	**Setting**
The number of registered persons in the participating family clinics is: 5,386 For preventive screening, those older than 30 years are eligible: 4,589 Approximately 10% are patients at high risk for CKD	At the primary level: • Ljubljana Health Center, family medicine clinic of Primož Štular MD • Sava med, family medicine clinic of Vojislav Ivetić MD • ZD Slovenj Gradec, family medicine clinic of Tina Virtič MD • ZD Nova Gorica, family medicine clinic of Matjaž Divjak MD At the secondary level: • General hospital Slovenj Gradec • University clinical center Ljubljana • General hospital Šempeter pri Gorici • University clinical center Maribor Health insurance institute of Slovenia
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Related original Good Practices and their Core Feature (s)	OptiMedis, CF1.1, CF1.2, CF1.3, CF1.4, CF2.1, CF3.1, CF3.2, CF6.3
Local Core Feature 1	New model of communication between health care providers at different levels (LCF 1)

SMART objective

By November 2022, the NAWG will define the criteria for the transition of patients from the primary to the secondary level, review existing tools for the exchange of patient data and prepare a proposal for their more efficient use.

Activities	Actors	Resources	Setting(s)	Timeline	Key Performance Indicators
• Meetings with NAWG (initial meeting to agree on implementation of activities, follow-up control meetings	• NAWG • Project management	• Human resources	• MS Teams	• October 2021 and every 2 months thereafter	• Minutes of meetings
• Determining criteria for the transition of patients between primary and secondary level	• Nephrologists and family physicians from NAWG • Nephrological Society	• Human resources	• Nephrological Society or. MS Teams	• October 2021 - April 2022	• Document with developed criteria

• Review of existing tools for the exchange of patient data	• Nephrologists and family physicians • representatives of ZZZS from NAWG • Public health institute	• Human resources • eHealth Platform	• MS Teams	• October 2021 – March 2022	• List of existing tools
• Preparation of a proposal for more efficient use and upgrading of tools for the exchange of patient data	• Nephrologists and family physicians from NAWG	• Human resources • eHealth platform	• Nephrological society or. MS Teams	• April 2022 – October 2022	• Document with prepared proposal
• Presentation of the proposal to ZZZS (administrator of payment models) and Public health institute (administrator of eHealth) to ensure the sustainable use of the proposed solutions	• NAWG	• Human resources	• ZZZS or MS Teams	• November 2022	• Minutes of the meeting
Local Core Feature 2 **SMART objective**	Population screening (LCF 2)				
In 6 months, nephrologists from NAWG will determine the parameters for CKD screening, and colleagues from ZZZS will examine the financial possibilities for this. By January 2023, participating family medicine clinics will invite 400 patients to the screening program.					
Activities	**Actors**	**Resources**	**Setting(s)**	**Timeline**	**Key Performance Indicators**
• Meetings with NAWG (initial meeting to agree on implementation of activities,	• NAWG	• Human resources	• MS Teams	• October 2021 and every 2 months	• Minutes of meetings

follow-up control meetings	• Project management			thereafter	
• Determination of criteria for CKD screening (clinical pathway for early detection of CKD)	• Nephrologists and family physicians from NAWG • Nephrological Society	• Human resources	• Nephrological Society or. MS Teams	• October 2021 – March 2022	• Document with determined criteria
• Agreement on payment for additional services (lab tests)	• ZZZS • Participating family medicine clinics	• Human resources	• ZZZS	• October 2021 - March 2022 •	• Agreement reached
• Carrying out screening in selected family medicine clinics	• Family medicine clinics	• Human resources • Laboratory - funds for additional tests	• Family medicine clinics	• April 2022 - January 2023	• Number of preventive examinations and tests performed
• Presentation of results and proposal to the Public health institute regarding the inclusion of additional tests in the program of family medicine reference clinics, to ensure sustainable implementation of screening	• NAWG • Public health institute	• Human resources	• ZZZS or MS Teams	• December 2022	• Minutes of the meeting and agreement on the inclusion of new tests in the family medicine reference clinics program
Local Core Feature 3	Patient coaching (LCF 3)				
SMART objective					
By August 2022, the NAWG, in collaboration with the Nephrology Society and the Patients' Association, will prepare educational materials for patients and educators.					

Activities	Actors	Resources	Setting(s)	Timeline	Key Performance Indicators
• Meetings with NAWG (initial meeting to agree on implementation of activities, follow-up control meetings	• NAWG • Project management	• Human resources	• MS Teams	• October 2021 and every 2 months thereafter	• Minutes of meetings
• Review of existing patient materials	• Nephrologists from NAWG • Patient Representative from NAWG	• Human resources	• Patients Association • Internet	• November 2021 – January 2022	• List of existing materials
• Update of materials / preparation of new materials for patients	• Nephrologists from NAWG • Patient Representative from NAWG	• Human resources • Financial resources for the preparation of materials	• Patients Association • Nephrological Society	• February 2022 – June 2022	• Prepared materials
• Preparation of materials for educators	• Nephrologists from NAWG • Nephrological Society	• Human resources • Financial resources for the preparation of materials	• Nephrological Society	• November 2021 – June 2022	Prepared materials
• Publishing materials for patients online and printing	• Nephrology Society • Patient Association	• Human resources • Financial resources for the preparation of materials	• Patients' Association • Internet	• July 2022 – August 2022	• Published materials

Local Core Feature 4	Payment model (LCF 4)
SMART objective	
By the end of 2022, NAWG billing model experts will review existing service payment contracts, as well as a list of existing services, and together with the nephrology profession prepare a proposal for new services (especially educational) and billing options.	

Activities	**Actors**	**Resources**	**Setting(s)**	**Timeline**	**Key Performance Indicators**
• Meetings with NAWG (initial meeting to agree on implementation of activities, follow-up control meetings	• NAWG • Project management	• Human resources	• MS Teams	• October 2021 and every 2 months thereafter	• Minutes of meetings
• Review of existing contracts	• Experts for payment models at ZZZS	• Human resources	• ZZZS	• November 2021 – February 2022	• Document with a report on existing contracts
• Review of existing medical services	• Experts for payment models at ZZZS	• Human resources	• ZZZS	• November 2021 – February 2022	• Document with a report on existing services
• Preparation of a proposal for new services and a proposal for their billing	• Experts for payment models at ZZZS • Nephrologists from NAWG	• Human resources	• ZZZS	• March 2022 – September 2022	• Document with the proposal
• Preparation of a proposal for the General Agreement, as the inclusion of new services in the General Agreement ensures their sustainable use	• Experts for payment models at ZZZS	• Human resources	• ZZZS	• October 2022 – December 2022	• Prepared proposal for the General Agreement

Implementation

1st PDSA Cycle

Plan

LCF1	New model of communication between health care providers at different levels (LCF 1)							
Activities (from the LAP)	**Actions**	**Actors**	**Timeline**	**KPIs MEASURE**				
				KPIs (from the LAP)	Who will collect the data?	When will the data be collected?	How will the data be collected?	Target value
Meetings with NAWG (initial meeting to agree on implementation of activities, follow-up control meetings	• Regular meetings with NAWG and project management	• NAWG • Project management	October 2021 and every 2 months thereafter	8 meetings held	Martina Zorko Kodelja	At each meeting	At each meeting	8
Determining criteria for the transition of patients between primary and secondary level (including a population segmentation exercise to group people in disease stages, define specific cutoff points for each stage and develop specific interventions for each stage, for example: promotion and health education for patients without diagnosis, hypertension or diabetes control for patients at risk and so forth.)	• Add a family medicine doctor to NAWG • determine criteria (clinical pathway)	• Nephrologists and family physicians from NAWG • Nephrological Society	October 2021 - April 2022	Document with developed criteria (Y/N)	Karmen Janša	Q2 2022	Document	Y
Review of existing tools for the exchange of patient data	• Get information	• Nephrologists and family physicians	October 2021 – March 2022	List of existing tools (Y/N)	Marjeta Zupet	Q2 2022	List	Y

	about the tools • Review • Prepare a list	• representatives of ZZZS from NAWG • Public health institute						
Preparation of a proposal for more efficient use and upgrading of tools for the exchange of patient data and proposal for complementary services in information sharing	•	• Nephrologists and family physicians from NAWG • ZZZS	April 2022 – September 2022	Document with prepared proposal (Y/N)	Marjeta Zupet	Q4 2022	Proposal	Y
Presentation of the proposal to ZZZS (administrator of payment models) and Public health institute (administrator of eHealth) to ensure the sustainable use	•	• NAWG	October 2022	Minutes of the meeting (Y/N)	Martina Zorko Kodelja	Q4	Meeting	Y

LCF2	Population screening (LCF 2)							
Activities (from the LAP)	**Actions**	**Actors**	**Timeline**	**KPIs MEASURE**				
				KPIs (from the LAP)	Who will collect the data?	When will the data be collected?	How will the data be collected?	Target value

Determination of criteria for CKD screening (clinical pathway for early detection of CKD) - population segmentation, risk strata for CKD and the specific set of interventions per strata	• Determine the tests (additional to Existing preventive tests) • Check the capacity of local laboratories	• Nephrologists and family physicians from NAWG • Nephrological Society	October 2021 – March 2022	Document with determined criteria (Y/N)	Karmen Janša	Q2 2022	Document	Y
Past experience with CKD screening	• Collect data from primary and secondary levels	• Nephrologists and family physicians from NAWG • Nephrological Society	October 2021 – March 2022	Report on past experiences	Karmen Janša	Q2 2022	Report	Y
Agreement on payment for additional services (lab tests)	• Determine the way of payment	• ZZZS • Participating family medicine clinics	October 2021 - March 2022	Agreement reached (Y/N)	Karmen Janša	Q2 2022	Agreement	Y
Carrying out screening in selected family medicine clinics (this activity largely depends on the course of the epidemic in 2022 in the country, as nurses from reference clinics are currently engaged in population vaccination and testing).	• Invite patients • Perform screening	• Participating family medicine clinics	April 2022 – November 2022	Number of preventive examinations and tests performed	Family medicine doctors	Q4 2022	Report	100

Presentation of results and proposal to the Public health institute regarding the inclusion of additional tests in the program of family medicine reference clinics, to ensure sustainable implementation of screening		• NAWG • Public health institute	December 2022	Minutes of the meeting and agreement on the inclusion of new tests in the family medicine reference clinics program (Y/N)	Karmen Janša	Q1 2023	Meeting	Y

LCF3	Patient coaching (LCF 3)							
Activities (from the LAP)	**Actions**	**Actors**	**Timeline**	**KPIs MEASURE**				
				KPIs (from the LAP)	Who will collect the data?	When will the data be collected?	How will the data be collected?	Target value
Review of existing patient materials		• Nephrologists from NAWG • Patient Representative from NAWG • Nurses from reference clinics	November 2021 – January 2022	List of existing materials (Y/N)	Jelka Lindič	Q1 2022	List	Y
Update of materials / preparation of new materials for patients		• Nephrologists from NAWG	February 2022 – June 2022	Prepared materials	Jelka Lindič	Q3 2022	Prepared materials	10

		• Patient Representative from NAWG						
Preparation of materials for educators (including how to help patients define their health goals and motivate them to actively participate in health programs linked to preventive care (blood sugar and hypertension control, weight loss, etc.)			November 2021 – June 2022	Prepared materials	Jelka Lindič	Q3 2022	Prepared materials	10
Publishing materials for patients online and printing		• Nephrology Society • Patient Association	July 2022 – August 2022	Published materials (Y/N)	Jelka Lindič	Q3 2022	Publication	Y

LCF4	Payment model (LCF 4)							
Activities (from the LAP)	**Actions**	**Actors**	**Timeline**	**KPIs MEASURE**				
				KPIs (from the LAP)	Who will collect the data?	When will the data be collected?	How will the data be collected?	Target value
Review of existing contracts		• Experts for payment models at ZZZS	November 2021 – February 2022	Document with a report on existing contracts (Y/N)	Marjeta Zupet	Q2 2022	Document	Y

Review of existing services paid by ZZZS to health care providers	• [….]	• Experts for payment models at ZZZS	November 2021 – February 2022	Document with a report on existing services (Y/N)	Marjeta Zupet	Q2 2022	List	Y
Preparation of a proposal for new services and a proposal for their billing including an analysis of cost savings potentials to define opportunities for financing complementary services where needed.	• [….]	• Experts for payment models at ZZZS • Nephrologists from NAWG	March 2022 – September 2022	Document with a report on existing services (Y/N)	Marjeta Zupet	Q4 2022	Proposal	Y
Preparation of a proposal for the General Agreement, as the inclusion of new services in the General Agreement ensures their sustainable use	•	• Experts for payment models at ZZZS	October 2022 – December 2022	Prepared proposal for the General Agreement (Y/N)	Marjeta Zupet	Q1 2023	Proposal	Y

Do

Cycle number (1 or 2)	**1**	
Activity	**KPI**	**Actual value**
Meetings with NAWG (initial meeting to agree on implementation of activities, follow-up control meetings	8 meetings held	6 25.11.2021 22.12.2021 23.2.2022 17.3.2022 20.5.2022 13.7.2022
Determining criteria for the transition of patients between primary and secondary level (including a population segmentation exercise to group people in disease stages, define specific cutoff points for each stage and develop specific interventions for each stage, for example: promotion and health education for patients without diagnosis, hypertension or diabetes control for patients at risk and so forth.)	Document with developed criteria (Y/N)	N In progress. We just recently added a familiy medicine doctor to the NAWG.
Review of existing tools for the exchange of patient data	List of existing tools (Y/N)	N In progress. Need to replan.
Preparation of a proposal for more efficient use and upgrading of tools for the exchange of patient data and proposal for complementary services in information sharing	Document with prepared proposal (Y/N)	N Not yet started.
Presentation of the proposal to ZZZS (administrator of payment models) and Public health institute (administrator of eHealth) to ensure the sustainable use	Minutes of the meeting (Y/N)	N Not yet started.
Determination of criteria for CKD screening (clinical pathway for early detection of CKD) - population segmentation, risk strata for CKD and the specific set of interventions per strata	Document with determined criteria (Y/N)	Y Nephrologists have determined the necessary tests (additional to existing preventive tests). The capacity of local laboratories is still being checked.
Past experience with CKD screening	Report on past experiences (Y/N)	N Data from the primary and secondary levels are still being collected.
Agreement on payment for additional services (lab tests)	Agreement reached (Y/N)	Y In the scope of reference clinics (extension of the preventive action program).

Carrying out screening in selected family medicine clinics (this activity largely depends on the course of the epidemic in 2022 in the country, as nurses from reference clinics are currently engaged in population vaccination and testing).	Number of preventive examinations and tests performed	0 We did not undertake this activity at all, as the medical staff from the referral clinics was transferred to other jobs during the epidemic. However, we sought some analyzes in the field of CKD screening and asked the authors for results.
Presentation of results and proposal to the Public health institute regarding the inclusion of additional tests in the program of family medicine reference clinics, to ensure sustainable implementation of screening	Minutes of the meeting and agreement on the inclusion of new tests in the family medicine reference clinics program (Y/N)	N Not yet started.
Review of existing patient materials	List of existing materials (Y/N)	Y
Update of materials / preparation of new materials for patients	Prepared materials	In progress.
Preparation of materials for educators (including how to help patients define their health goals and motivate them to actively participate in health programs linked to preventive care (blood sugar and hypertension control, weight loss, etc.)	Prepared materials	In progress.
Publishing materials for patients online and printing	Published materials (Y/N)	Partially Some already published on the website.
Review of existing contracts	Document with a report on existing contracts (Y/N)	Y
Review of existing services paid by ZZZS to health care providers	Document with a report on existing services (Y/N)	Y
Preparation of a proposal for new services and a proposal for their billing including an analysis of cost savings potentials to define opportunities for financing complementary services where needed.	Document with a report on existing services (Y/N)	N In progress: preparation of the new payment model.
Preparation of a proposal for the General Agreement, as the inclusion of new services in the General Agreement ensures their sustainable use	Prepared proposal for the General Agreement (Y/N)	N Not yet started.

QUESTIONS	ANSWERS
What was actually implemented? Any deviation from the planned actions	We had 6 meetings (2 with entire NAWG, other just with the lead nephrologist). Some activities are late (determining criteria, tools, collecting data…) and will need to be replanned. Due to pandemic, we decided not to undertake the screening of patients in family medicine clinics. Instead, we will go through some analysis of CKD screenings (articles). We are on time with education materials and with the activities regarding payment model,
Problems? Unexpected findings? Please describe	1. Impact of the epidemic: • Lack of time of co-workers (clinics) in the project • Inability to perform certain activities – screening • Things are going slower than we would like 2. During the planning and implementation, we discovered many other activities that would be necessary for the implementation of the entire payment model. 3. Lack of financial resources for an integrated solution. 4. There is a huge amount of reporting on the project. 5. After carefully examining the Optimedis model, we found that due to legal restrictions we cannot fully transfer it to the Slovenian environment. 6. Lack of staff (due to other priorities) 7. Short time of the project.

IMPLEMENTATION PROGRESS OF THE LOCAL GOOD PRACTICE			
0-25%	**25-50%**	**50-75%**	**75-100%**
	X		

Study

Cycle number (1or 2)						
Activity	**KPI**	**Target value (from PLAN)**	**Actual value (from DO)**	**Reasons for the deviations**	**Mitigation actions implemented**	**Impact of mitigation actions**
Meetings with NAWG (initial meeting to agree on implementa-	8 meetings held	8	6 25.11.2021 22.12.2021 23.2.2022	No deviation (8 meetings until the	-	-

tion of activities, follow-up control meetings			17.3.2022 20.5.2022 13.7.2022	end of 2022)		
Determining criteria for the transition of patients between primary and secondary level (including a population segmentation exercise to group people in disease stages, define specific cutoff points for each stage and develop specific interventions for each stage, for example: promotion and health education for patients without diagnosis, hypertension or diabetes control for patients at risk and so forth.)	Document with developed criteria (Y/N)	Y	N In progress. We just recently added a familiy medicine doctor to the NAWG.	It was difficult to find a representative of Family medicine doctors.	Accelerate activities Replan by end of 2022.	This activity will be part of PDSA 2.
Review of existing tools for the exchange of patient data	List of existing tools (Y/N)	Y	N In progress. Need to replan.	Started with the activity later than planned due to other priorities of employees.	Accelerate activities Replan by end of 2022.	This activity will be part of PDSA 2.
Preparation of a proposal for more efficient use and upgrading of tools for the exchange of patient data and proposal for complementary services in information sharing	Document with prepared proposal (Y/N)	Y	N Not yet started.	Connected to the previous activity.	Accelerate activities Replan by end of 2022.	This activity will be part of PDSA 2.
Presentation of the proposal to ZZZS (administrator of payment models) and Public health institute (administrator of eHealth) to ensure the sustainable use	Minutes of the meeting (Y/N)	Y	N Not yet started.	Activity has not yet started according to plan.	-	-

Determination of criteria for CKD screening (clinical pathway for early detection of CKD) - population segmentation, risk strata for CKD and the specific set of interventions per strata	Document with determined criteria (Y/N)	Y	Y Nephrologists have determined the necessary tests (additional to existing preventive tests). The capacity of local laboratories is still being checked.	-	-	-
Past experience with CKD screening	Report on past experiences (Y/N)	Y	N Data from the primary and secondary levels are still being collected.	It is difficult to find data, also issues with personal data protection.	Accelerate activities Replan by end of 2022.	This activity will be part of PDSA 2.
Agreement on payment for additional services (lab tests)	Agreement reached (Y/N)	Y	Y In the scope of reference clinics (extension of the preventive action program).	-	-	-
Carrying out screening in selected family medicine clinics (this activity largely depends on the course of the epidemic in 2022 in the country, as nurses from reference clinics are currently engaged in population vaccination and testing).	Number of preventive examinations and tests performed	100	0 We did not undertake this activity at all, as the medical staff from the referral clinics was transferred to other jobs during the epidemic. However, we sought some analyzes in the field of CKD screening and asked the authors for results.	Activity cancelled.	-	We will use data from several published articles and analysis.
Presentation of results and proposal to the Public health institute regarding the inclusion of additional tests in the program of family medicine reference clinics, to ensure sustainable implementation of screening	Minutes of the meeting and agreement on the inclusion of new tests in the family medicine reference clinics program (Y/N)	Y	N Not yet started.	Activity has not yet started according to plan.	-	-
Review of existing patient materials	List of existing materials (Y/N)	Y	Y	-	-	-

Update of materials / preparation of new materials for patients	Prepared materials	10	In progress.	Due to a large amount of materials not finished in time.	Replan by the end of October 2022.	This activity will be part of PDSA 2.
Preparation of materials for educators (including how to help patients define their health goals and motivate them to actively participate in health programs linked to preventive care (blood sugar and hypertension control, weight loss, etc.)	Prepared materials	10	In progress.	Due to a large amount of materials not finished in time.	Replan by the end of October 2022.	This activity will be part of PDSA 2.
Publishing materials for patients online and printing	Published materials (Y/N)	Y	Partially Some already published on the website.	Materials are published as they are prepared.	-	-
Review of existing contracts	Document with a report on existing contracts (Y/N)	Y	Y	-	-	-
Review of existing services paid by ZZZS to health care providers	Document with a report on existing services (Y/N)	Y	Y	-	-	-
Preparation of a proposal for new services and a proposal for their billing including an analysis of cost savings potentials to define opportunities for financing complementary services where needed.	Document with a report on existing services (Y/N)	Y	N In progress: preparation of the new payment model.	Not yet finished. Still within the plan. Suggest replanning by the end of December 2022.	Suggest replanning by the end of December 2022.	This activity will be part of PDSA 2.
Preparation of a proposal for the General Agreement, as the inclusion of new services in the General Agreement ensures their sustainable use	Prepared proposal for the General Agreement (Y/N)	Y	N Not yet started.	Activity has not yet started according to plan.	-	-

Act

Cycle number (1 or 2)	**1**		
Activity	**Main-tain**	**Adapt**	**Aban-don**
Meetings with NAWG (initial meeting to agree on implementation of activities, follow-up control meetings	**X**		
Determining criteria for the transition of patients between primary and secondary level (including a population segmentation exercise to group people in disease stages, define specific cutoff points for each stage and develop specific interventions for each stage, for example: promotion and health education for patients without diagnosis, hypertension or diabetes control for patients at risk and so forth.)		**X** Replan by end of 2022.	
Review of existing tools for the exchange of patient data		**X** Replan by end of 2022.	
Preparation of a proposal for more efficient use and upgrading of tools for the exchange of patient data and proposal for complementary services in information sharing		**X** Replan by end of 2022.	
Presentation of the proposal to ZZZS (administrator of payment models) and Public health institute (administrator of eHealth) to ensure the sustainable use	**X**		
Determination of criteria for CKD screening (clinical pathway for early detection of CKD) - population segmentation, risk strata for CKD and the specific set of interventions per strata	**Finished.**		
Past experience with CKD screening		**X** Replan by end of 2022.	
Agreement on payment for additional services (lab tests)	**Finished**		
Carrying out screening in selected family medicine clinics (this activity largely depends on the course of the epidemic in 2022 in the country, as nurses from reference clinics are currently engaged in population vaccination and testing).			**X**
Presentation of results and proposal to the Public health institute regarding the inclusion of additional tests in the program of family medicine reference clinics, to ensure sustainable implementation of screening	**X**		
Review of existing patient materials	**Finished.**		
Update of materials / preparation of new materials for patients		**X** Replan by the end of	

		October 2022.	
Preparation of materials for educators (including how to help patients define their health goals and motivate them to actively participate in health programs linked to preventive care (blood sugar and hypertension control, weight loss, etc.)		**X** Replan by the end of October 2022.	
Publishing materials for patients online and printing	**X**		
Review of existing contracts	**Finished**		
Review of existing services paid by ZZZS to health care providers	**Finished**		
Preparation of a proposal for new services and a proposal for their billing including an analysis of cost savings potentials to define opportunities for financing complementary services where needed.		**X Replan by the end of December 2022.**	
Preparation of a proposal for the General Agreement, as the inclusion of new services in the General Agreement ensures their sustainable use	**X**		

QUESTIONS	**ANSWERS**
Any new proposed action for the future?	No.

2nd PDSA Cycle

Plan

LCF1	New model of communication between health care providers at different levels (LCF 1)							
Activities (from the LAP)	**Actions**	**Actors**	**Timeline**	**KPIs MEASURE**				
				KPIs (from the LAP)	Who will collect the data?	When will the data be collected?	How will the data be collected?	Target value
Meetings with NAWG (initial meeting to agree on implementation of activities, follow-up control meetings	• Regular meetings with NAWG and project management	• NAWG • Project management	October 2021 and every 2 months thereafter	8 meetings held	Martina Zorko Kodelja	At each meeting	At each meeting	8
Determining criteria for the transition of patients between primary and secondary level (including a population segmentation exercise to group people in disease stages, define specific cutoff points for each stage and develop specific interventions for each stage, for example: promotion and health education for patients without diagnosis, hypertension or diabetes control for patients at risk and so forth.)	• Determine criteria (clinical pathway)	• Nephrologists and family physicians from NAWG • Nephrological Society	December 2022	Document with developed criteria (Y/N)	Karmen Janša	Q1 2023	Document	Y

Review of existing tools for the exchange of patient data	• Get information about the tools • Review • Prepare a list	• Nephrologists and family physicians • representatives of ZZZS from NAWG • Public health institute	December 2022	List of existing tools (Y/N)	Marjeta Zupet	Q1 2023	List	Y
Preparation of a proposal for more efficient use and upgrading of tools for the exchange of patient data and proposal for complementary services in information sharing	•	• Nephrologists and family physicians from NAWG • ZZZS	December 2022	Document with prepared proposal (Y/N)	Marjeta Zupet	Q1 2023	Proposal	Y
Presentation of the proposal to ZZZS (administrator of payment models) and Public health institute (administrator of eHealth) to ensure the sustainable use	•	• NAWG	January 2023	Minutes of the meeting (Y/N)	Martina Zorko Kodelja	Q1 2023	Meeting	Y

LCF2	Population screening (LCF 2)							
Activities (from the LAP)	**Actions**	**Actors**	**Time-line**	**KPIs MEASURE**				
				KPIs (from the LAP)	Who will collect the data?	When will the data be collected?	How will the data be collected?	Target value

Past experience with CKD screening	• Collect data from primary and secondary levels	• Nephrologists and family physicians from NAWG • Nephrological Society	December 2022	Report on past experiences	Karmen Janša	Q4 2022	Report	Y
Presentation of results and proposal to the Public health institute regarding the inclusion of additional tests in the program of family medicine reference clinics, to ensure sustainable implementation of screening		• NAWG • Public health institute	December 2022	Minutes of the meeting and agreement on the inclusion of new tests in the family medicine reference clinics program (Y/N)	Karmen Janša	Q1 2023	Meeting	Y

LCF3	Patient coaching (LCF 3)							
Activities (from the LAP)	**Actions**	**Actors**	**Timeline**	**KPIs MEASURE**				
				KPIs (from the LAP)	Who will collect the data?	When will the data be collected?	How will the data be collected?	Target value
Update of materials / preparation of new materials for patients		• Nephrologists from NAWG • Patient Representative from NAWG	October 2022	Prepared materials	Jelka Lindič	Q4 2022	Prepared materials	10

Preparation of materials for educators (including how to help patients define their health goals and motivate them to actively participate in health programs linked to preventive care (blood sugar and hypertension control, weight loss, etc.)			October 2022	Prepared materials	Jelka Lindič	Q4 2022	Prepared materials	10
Publishing materials for patients online and printing		• Nephrology Society • Patient Association	December 2022	Published materials (Y/N)	Jelka Lindič	Q4 2022	Publication	Y

LCF4	Payment model (LCF 4)							
Activities (from the LAP)	**Actions**	**Actors**	**Timeline**	**KPIs MEASURE**				
				KPIs (from the LAP)	Who will collect the data?	When will the data be collected?	How will the data be collected?	Target value
Preparation of a proposal for new services and a proposal for their billing including an analysis of cost savings potentials to define opportunities for financing complementary services where needed.	• [….]	• Experts for payment models at ZZZS • Nephrologists from NAWG	December 2022	Document with a report on existing services (Y/N)	Marjeta Zupet	Q1 2023	Proposal	Y
Preparation of a proposal for the General Agreement, as the inclusion of new services in the General Agreement ensures their sustainable use	•	• Experts for payment models at ZZZS	October 2022 – December 2022	Prepared proposal for the General Agreement (Y/N)	Marjeta Zupet	Q1 2023	Proposal	Y

Do

Cycle number (1 or 2)	**2**	
Activity	**KPI**	**Actual value**
Meetings with NAWG (initial meeting to agree on implementation of activities, follow-up control meetings	8 meetings held (together in both cycles)	6 + 2 25.11.2021 22.12.2021 23.2.2022 17.3.2022 20.5.2022 13.7.2022 22.9.2022 19.10.2022
Determining criteria for the transition of patients between primary and secondary level (including a population segmentation exercise to group people in disease stages, define specific cutoff points for each stage and develop specific interventions for each stage, for example: promotion and health education for patients without diagnosis, hypertension or diabetes control for patients at risk and so forth.)	Document with developed criteria (Y/N)	Y
Review of existing tools for the exchange of patient data	List of existing tools (Y/N)	N In progress. Will be done later in 2023, outside of JA JADECARE timeline.
Preparation of a proposal for more efficient use and upgrading of tools for the exchange of patient data and proposal for complementary services in information sharing	Document with prepared proposal (Y/N)	N In progress. Will be done later in 2023, outside of JA JADECARE timeline.
Presentation of the proposal to ZZZS (administrator of payment models) and Public health institute (administrator of eHealth) to ensure the sustainable use	Minutes of the meeting (Y/N)	N Not yet started. Will be done later in 2023, outside of JA JADECARE timeline.
Past experience with CKD screening	Report on past experiences (Y/N)	Y – partially (not in the extent we planned to). We contacted several health centers for their data on screening. Only some replied (Health Center Maribor, Health Center Slovenj Gradec). We got the data on screening for other specialities, such as diabetes, stroke, heart attack. Reference clinics do not have any data on CKD. We collected and studied several analysis made in past.

Presentation of results and proposal to the Public health institute regarding the inclusion of additional tests in the program of family medicine reference clinics, to ensure sustainable implementation of screening	Minutes of the meeting and agreement on the inclusion of new tests in the family medicine reference clinics program (Y/N)	N Not yet started. Will be done later, outside of JA JADECARE timeline. At the moment the family medicine is in big crisis, we are facing a shortage of family medicine doctors. Also, a change in the role of reference clinics and nurses is being done on the national level. This activity will be done as soon as the situation in family medicine and reference clinics calms down.
Update of materials / preparation of new materials for patients	Prepared materials	Y 55 materials reviewed and updated
Preparation of materials for educators (including how to help patients define their health goals and motivate them to actively participate in health programs linked to preventive care (blood sugar and hypertension control, weight loss, etc.)	Prepared materials	Y 8 materials reviewed and updated
Publishing materials for patients online and printing	Published materials (Y/N)	Y All materials published on the internet.
Preparation of a proposal for new services and a proposal for their billing including an analysis of cost savings potentials to define opportunities for financing complementary services where needed.	Document with a report on existing services (Y/N)	N In progress: working on details with nephrology specialists. Our (ZZZS) internal plan is to start using the new payment model on 1.1.2024.
Preparation of a proposal for the General Agreement, as the inclusion of new services in the General Agreement ensures their sustainable use	Prepared proposal for the General Agreement (Y/N)	N In progress. Our (ZZZS) internal plan is to start using the new payment model on 1.1.2024. Proposal for the General Agreement must be prepared until September 2023 (according to our (ZZZS) internal timeline).

QUESTIONS	ANSWERS
What was actually implemented? Any deviation from the planned actions	We had 2 meetings. Some activities are late and will be finished outside the JA JADECARE timeline. Education materials were renewed and published as planned. Payment model will be prepared according to our internal timeline (to be included into the General Agreement for 2024).
Problems? Unexpected findings? Please describe	1. Lack of financial resources for an integrated solution. 2. There is a huge amount of reporting on the project. 3. Lack of staff (due to other priorities) 4. Short time of the project. 5. Crisis of the family medicine in Slovenia. 6. We did not receive a lot of input (data, analysis) form health care providers.

IMPLEMENTATION PROGRESS OF THE LOCAL GOOD PRACTICE			
0-25%	**25-50%**	**50-75%**	**75-100%**
		X	

Study

Cycle number (1or 2)		2				
Activity	**KPI**	**Target value (from PLAN)**	**Actual value (from DO)**	**Reasons for the deviations**	**Mitigation actions implemented**	**Impact of mitigation actions**
Meetings with NAWG (initial meeting to agree on implementation of activities, follow-up control meetings	8 meetings held	8 (for both PDSA cycles)	6 + 2 25.11.2021 22.12.2021 23.2.2022 17.3.2022 20.5.2022 13.7.2022 22.9.2022 19.10.2022	No deviation	-	-
Determining criteria for the transition of patients between primary and secondary level (including a population segmentation exercise to group people in disease	Document with developed criteria (Y/N)	Y	Y	No deviation	-	-

stages, define specific cutoff points for each stage and develop specific interventions for each stage, for example: promotion and health education for patients without diagnosis, hypertension or diabetes control for patients at risk and so forth.)						
Review of existing tools for the exchange of patient data	List of existing tools (Y/N)	Y	N In progress. Need to replan.	Started with the activity later than planned due to other priorities of employees.	Accelerate activities Replan to our internal (ZZZS) plans for 2023.	This activity will finish outside the JA JADECARE timeline.
Preparation of a proposal for more efficient use and upgrading of tools for the exchange of patient data and proposal for complementary services in information sharing	Document with prepared proposal (Y/N)	Y	N Not yet started.	Connected to the previous activity.	Accelerate activities Replan to our internal (ZZZS) plans for 2023.	This activity will finish outside the JA JADECARE timeline.
Presentation of the proposal to ZZZS (administrator of payment models) and Public health institute (administrator of eHealth) to ensure the sustainable use	Minutes of the meeting (Y/N)	Y	N Not yet started.	Connected to the previous activity.	Accelerate activities Replan to our internal (ZZZS) plans for 2023.	This activity will finish outside the JA JADECARE timeline.
Past experience with CKD screening	Report on past experiences (Y/N)	Y	Y	-	-	-
Presentation of results and proposal to the Public health institute re-	Minutes of the meeting and agreement	Y	N	Not yet started due to crisis in the family medicine (shortage).	This activity will be done as soon as	This activity will be done outside the JA

garding the inclusion of additional tests in the program of family medicine reference clinics, to ensure sustainable implementation of screening	on the inclusion of new tests in the family medicine reference clinics program (Y/N)				the situation in family medicine and reference clinics calms down. Plan internally for 2024.	JADECARE timeline.
Update of materials / preparation of new materials for patients	Prepared materials	10	Y	55 materials reviewed and updated.	-	-
Preparation of materials for educators (including how to help patients define their health goals and motivate them to actively participate in health programs linked to preventive care (blood sugar and hypertension control, weight loss, etc.)	Prepared materials	10	Y	55 materials reviewed and updated.	-	-
Publishing materials for patients online and printing	Published materials (Y/N)	Y	Y	All materials published on the internet. http://www.nephro-slovenia.si	-	-
Preparation of a proposal for new services and a proposal for their billing including an analysis of cost savings potentials to define opportunities for financing complementary services where needed.	Document with a report on existing services (Y/N)	Y	N In progress	Working on details with nephrology specialists.	The Payment model will be finished by End of June 2023.	Our (ZZZS) internal plan is to start using the new payment model on 1.1.2024.
Preparation of a proposal for the General Agree-	Prepared proposal for the General	Y	N In progress	The final version will be prepared after the previous activity is finished (June 2023).	The proposal for the General	Our (ZZZS) internal plan is to start using

ment, as the inclusion of new services in the General Agreement ensures their sustainable use	Agreement (Y/N)				Agreement must be ready in September 2023.	the new payment model on 1.1.2024.

Act

Cycle number (1 or 2)	**1**		
Activity	**Maintain**	**Adapt**	**Abandon**
Meetings with NAWG (initial meeting to agree on implementation of activities, follow-up control meetings	**X** Meetings also in 2023, until all activities are finished.		
Review of existing tools for the exchange of patient data		**X** Accelerate activities Replan to our internal (ZZZS) plans for 2023.	
Preparation of a proposal for more efficient use and upgrading of tools for the exchange of patient data and proposal for complementary services in information sharing		**X** Accelerate activities Replan to our internal (ZZZS) plans for 2023.	
Presentation of the proposal to ZZZS (administrator of payment models) and Public health institute (administrator of eHealth) to ensure the sustainable use		**X** Accelerate activities Replan to our internal (ZZZS) plans for 2023.	
Presentation of results and proposal to the Public health institute regarding the inclusion of additional tests in the program of family medicine reference clinics, to ensure sustainable implementation of screening		**X** This activity will be done as soon as the situation in family medicine and reference clinics calms down. Plan internally for 2024.	
Preparation of a proposal for new services and a proposal for their billing including an analysis of cost savings potentials to define opportunities for financing complementary services where needed.		**X** Replan - The Payment model will be finished by End of June 2023.	

Preparation of a proposal for the General Agreement, as the inclusion of new services in the General Agreement ensures their sustainable use		**X** Replan - The proposal for the General Agreement must be ready in September 2023.	

QUESTIONS	**ANSWERS**
Any new proposed action for the future?	No.

Post-implementation

ITEM	ANSWER
Title and Abstract	
Title	Integrated care in nephrology
Abstract	Our long-term quadruple goal is to improve the health of the population in the field of CKD, increase the satisfaction and empowerment of patients with CKD, increase the satisfaction of health professionals with new education and prevention options and save money on hospitalizations, drugs and dialysis. These are the goals we are striving for in the next few years. However, as time within JA JADECARE is limited, we will focus mainly on the preparation of starting points for improving communication between the primary and secondary level, for improving preventive activities in the field of CKD, for billing new services (especially educational) in the field of CKD. We will prepare new educational materials and review the existing ones to increase the empowerment of patients. To ensure the success of our activities, we have included all interested parties in the NAWG (family physicians, nephrology specialists, payment model experts, nephrology patients' association). We will also invite experts from the field of family medicine reference clinics and e-Medical record from the public health institute to participate in the planned activities to ensuring sustainability use of the proposed solutions.
Why did you start?	**Answer**
Problem description	• Chronic kidney disease (CKD) is becoming a major health and cost problem in Europe and in our country, as it is associated with high morbidity, mortality and treatment costs. The World Health Organization therefore ranked chronic kidney disease as a priority in 2006 in the treatment of non-communicable chronic diseases. According to epidemiologic research in EU countries, the prevalence of chronic kidney disease exceeds even the prevalence of diabetes, the control of which is defined by most western countries and Slovenia as the main goal of public health - at least every tenth adult has CKD. • The final and irreversible condition of chronic kidney disease is end-stage renal failure, which is associated with significantly poorer quality of life and high costs to the health system. It is estimated that as much as 2% of available funding is used to replace end-stage renal disease in Europe, which is needed by 0.1% of the population. We have effective preventive measures at our disposal to prevent the development of renal failure, as well as cheap treatment that can slow down or even stop the progression of chronic kidney disease and its complications, prevent or delay the end-stage failure and reduce cardiovascular complications, which are the most common cause of morbidity and premature mortality in these patients. • Regarding the financial burden, it is estimated that at least 2%, and at most 5-6% of the available financial resources are used for the replacement treatment of end-stage renal failure in Europe, which is needed by 0.1 to 0.2% of the population. In Slovenia, according to ZZZS data, there were 2,700 people in the chronic dialysis program in 2019 and 2,795 people in 2021. 53 people in 2021 and 37 people in 2019 had kidney transplant, which represents 0.16% of the adult population in both years. The costs for chronic dialysis and performed transplants amounted to 50 million euros in 2019 and 53 million euros in 2021, which represents 2.4% in 2019 and 2.2% in 2021 of all expenses for health services from mandatory health insurance. • According to epidemiological research in EU countries, we estimated, that currently 150.000 to 200,000 people in Slovenia have CKD. Due to greater awareness of the profession and lay people and the establishment of family medicine reference clinics, the number of newly diagnosed patients with CKD is increasing, the number of referrals to the secondary and tertiary level is increasing, while working conditions and treatment remained unchanged at the secondary and tertiary level.

	• We believed that it was high time that we recognized CKD as an important problem in maintaining public health and take action in this regard. Therefore, we proposed a new comprehensive approach to the management of chronic kidney disease. In this way we wanted to improve:
	  ○ preventive measures,
	  ○ early detection and
	  ○ staged treatment of a patient with chronic kidney disease at the primary, secondary and tertiary levels.
	
	We wanted to support these clinical goals with new organizational approaches and a customized payment model.

Available knowledge	• Jelka Lindič. Nov model zdravstvene obravnave ljudi s kronično ledvično boleznijo. Slovensko nefrološko društvo. 2020. • Bojan Vujkovac et al.: Solutions for management of chronic kidney disease (CKD). Healthdays.si, Ljubljana, 10th of October 2019 • Bojan Vujkovac: Drugačna obravnava kroničnih bolezni – KLB kot model. Predstavitev na Ministrstvu za zdravje, 18. 4. 2017 • Valentijn et al.: Value-based integrated (renal) care: setting a development agenda for research and implementation strategies. BMC Health Services Research (2016) • Case study – Innovating the ESRD model of care to achieve the triple aim. DaVita HealthCare Partners Inc., 2015 • Renal integrated care pathway - Guide for Victorian renal services. State of Victoria, June 2016, ISBN 978-0-7311-6965-8. • Narva AS,Norton MJ and Boulware RE. Educating Patients about CKD: The Path to Self-Management and Patient-Centered Care. Clin J Am Soc Nephrol. 2016 Apr 7; 11(4): 694–703. • Golestaneh, Ladan All-Cause Costs Increase Exponentially with Increased Chronic Kidney Disease Stage, AJMC, Vol. 23; No. 10, Sup. June 2017.
Rationale	At ZZZS, we have a department that deals with updating and developing payment models for health services. Our task is to update existing models based on calls from the field (profession) in cooperation with the profession, and to study new types of payment models used elsewhere in the world. The goals we pursue in the preparation of new payment models: – ensure the best treatment outcomes for patients (comprehensive care and quality), – include the use of newer technologies, – promote the efficient performance of services and economical use of materials, – determine service prices based on cost analyses, – minimize administrative burdens, – provide the basis for simple and effective control. The ZZZS internal team was very interested in studying and implementing the Optimedis model. After careful examination of the Optimedis model, we found that due to legal restrictions, it will not be possible to fully transfer it into the Slovenian healthcare system, but individual building blocks could be implemented. That's why we focused on transferring the idea that by investing more in preventive and educational activities, we can reduce treatment costs. Our greatest advantage for the introduction of good practice in the field of CKD is in a highly professional and working group consisting of nephrology specialists, family medicine doctors, a specialist in clinical laboratory medicine, a patient representative and experts in the field of economics in healthcare and billing models. Other advantages are the previous experience and good organization of primary health care regarding the implementation of

	preventive activities, detection and management of individual non-communicable chronic diseases, a highly professional, interested and proactive group for CKD at the Slovenian Nephrological Society, social activities of kidney patients and a trained team at ZZZS for working with structured and digitized data from health services and the development of billing models.
Specific aims	• to improve the health of the population: prolonging the quality of life of persons with CKD, early detection and slowing down of the progression of the disease, and preservation of the ability to work and social inclusion; • to improve the experience of people with health care: achieve good empowerment of people with CKD regarding nutrition, physical activity, risk factors and complications at all stages of CKD from detection to end-stage renal failure; • reduce unnecessary costs: with good organization of processes, early recognition and treatment of diseases, there will be fewer complications, less need for expensive drugs, reduction of hospital treatments and prevention or postponement of the start of kidney replacement therapy; • to ensure the satisfaction of the service provider: the introduction of new organizational and integrated pathways and the introduction of additional services will enable providers to work of a higher quality;
What did you do?	**Answer**
Context	Results from SWOT

		STRENGTHS	WEAKNESSES
	INTERNAL	**General strengths:** - NAWG brings together experts from all relevant fields to introduce the Optimedis oGP in the field of nephrology (nephrologists, experts in payment models) - Existence of good practices in the field of innovative payment models (Optimedis) that we will use - Participation in JA JADECARE - The small size of our country and individual institutions **Strengths of ZZZS:** - We are a quickly responsive group of experts (Field of Analytics and Development) with a good knowledge of payment models (current in Slovenia) - We have established links at other institutions that are crucial in the introduction of good practice (NIJZ, Slovenian Nephrological Society…) - Qualified team for working with data and BI tools - We have a lot of data on performed and paid health services (form billing data) **Strengths of primary health care:** - Good organization of primary health care in terms of preventive activities; - Already established organization of detection and management of individual chronic diseases at the primary level: specially trained graduate nurse within the family doctor's clinic; - Already established organization of educational workshops for a healthy lifestyle and certain chronic diseases: Health Education Centers, Health Promotion Centers;	**Weaknesses of ZZZS:** - A small group of internal experts primarily engaged in other tasks - Lack of initial financial resources (to launch the OptiMedis model) - We do not have yet established management based on data (analysis, business indicators, quality indicators…) for the field of CKD - No connection to other (non-billing) data **Weaknesses of primary health care:** - Poor opportunities for structured communication between a family doctor and a specialist nephrologist - Preventive check-up programs in reference clinics do not include searching for patients with CKD

		- Good access to nephrology specialists - Willingness to cooperate with secondary / tertiary health care **Strengths of nephrology specialist activity:** - Proactivity of nephrologists - Highly professional, interested and self-initiated working group for CKD at the Slovenian Nephrological Society. - Existence of good practices in the field of connection between primary health care and nephrology specialist, new approach to the treatment of persons with CKD, especially in the field of monitoring of patients and education of patients **Strengths of patient groups:** - Kidney patients are well organized in the patient society - The existence of many educational materials - Patients' interest in innovations in the field of prevention and education	**Weaknesses of nephrology specialist activity:** - The contracts with ZZZS do not define clear teams for the field of specialist nephrology treatment (they only operate within specialist internal medicine clinics) - Outdated payment model: there are no built-in incentives for the implementation of education and diet therapy, which is necessary for the empowerment of people with CKD.
	EXTERNAL	**OPPORTUNITIES**	**THREATS**
		- Existing program: New model of medical treatment of people with CKD, prepared by the Slovenian Nephrological Society - Well organised and active associations of patients with CKD - The number of newly diagnosed patients with CKD is steadily increasing due to greater awareness of the profession and lay people and the establishment of reference clinics, and the number of referrals to the secondary and tertiary level is also increasing. - Existence of individual IT solutions	- The increase in the number of patients with CKD, while working conditions and treatment at the secondary and tertiary levels remained unchanged - Rising costs for the treatment of patients with CKD - Lack of a national strategy for the management of CKD (such as exists for diabetes, cancer) - Poorly connected levels of health care (primary, secondary) - Poor data transfer between different levels of health care (only in one direction - from secondary / tertiary to primary level)

		- Existence of an interoperable spine (but only in one direction - from the secondary / tertiary to the primary level)	- The use of existing IT tools is not widespread enough, - Lack of a register of patients with CKD. - Changes in payment models are limited by existing legislation, the General Agreement and the resources available. - Team expansions at the specialist level require additional funding. - The unacceptability of the new model among the partners of the General Agreement

Strategic intervention areas:

- Integration of the primary level with the specialist level, where it is necessary to define the rules when the patient is sent from one level to another, as well as to enable the exchange of data in both directions.
- Establish conditions for education at the specialist level.
- Cooperation with primary health care, where changes are planned in the field of reference clinics, regarding detection and education / workshops for patients with CKD.
- Collaborate with partners in the preparation and acceptability of a new payment model.

Intervention(s)

Target population:

- Approximately 10% are patients at high risk for CKD.
- For preventive screening, those older than 50 years are eligible.

Team involved:

ZZZS	Organizer (Project manager)	1
ZZZS	Experts: - payment models experts, - medical doctor	4
Slovenian Nephrological Society	Experts: medical doctors, nephrology specialists	3
Nephrology specialists: - General hospital Slovenj Gradec, - University medical center Ljubljana	Experts: medical doctors, nephrology specialists, Front-line stakeholders, Implementers	4
Family medicine practises with reference clinics (FMP): Health centre Slovenj Gradec, a smaller health centre from Ljubljana region)	Experts: medical doctors, family medicine specialists, nurses, Front-line stakeholders, Implementers	1
Patient Representative - Association of Kidney Patients' Associations)	Patient	1
Slovenian Association for Clinical Chemistry and Laboratory Medicine	Biochemist	1

Study of the Intervention(s)

- Application of the new clinical pathway in practice
- enforcement of agreements on the payment of new services (General Agreement)
- planned analytics and data monitoring (number of services, costs, performed laboratory services, dialysis)

	We estimate that the effect will only show up in the analysis after the completion of JADEC-ARE, as the time period was too short
Measures	• Regular meetings of the NAWG • Determining criteria for the transition of patients between levels • Determining the criteria for CKD screening • Collect reports/analysis on past experiences with CKD • Prepare materials for education of patients • Prepare a list of new services and their funding • Inclusion of new services into the General agreement
Analysis	**Qualitative and quantitative data** • Compare KPIs with implementation status, • Assess and quantify anticipated outputs, • Study data: demographic, health insurance, health care services data, billing data • stakeholder meetings • discuss findings at national and international workshops/conferences.
What did you find?	**Answer**

Results	**What was implemented:**
	Some activities were late in comparison with the plan (determining criteria, tools, collecting data…) and will be finished outside the JA JADECARE timeline.
	
	Due to pandemic, we decided not to undertake the screening of patients in family medicine clinics. Instead, we went through some analysis of CKD screenings (articles).
	
	Problems:
	• Impact of the epidemic:
	  ○ Lack of time of co-workers (clinics) in the project
	  ○ Inability to perform certain activities – screening
	  ○ Things are going slower than we would like
	• During the planning and implementation, we discovered many other activities that would be necessary for the implementation of the entire payment model.
	• Lack of financial resources for an integrated solution.
	• There is a huge amount of reporting on the project.
	• After carefully examining the Optimedis model, we found that due to legal restrictions we cannot fully transfer it to the Slovenian environment.
	• Lack of staff (due to other priorities)
	• Short time of the project.
	• Crisis of the family medicine in Slovenia.
	• We did not receive a lot of input (data, analysis) form health care providers.
	
	Unexpected findings
	• Above all, working with a professional team that is really good and efficient. The professional team is really interested in changes in their field.
	• We chose a really good team (NAWG) that has a wide view of the field, a view from all angles. We also suggest such a team design for preparing other payment models.
	• Identification of additional issues that need to be regulated in the system, and we have approached the regulation within the project or outside.

What does it mean?	**Answer**
Summary	Whereas all LGP components are relevant, the entire program was too ambitious for the time available. Many processes have started but are not yet finalised. It is important, however, that we agreed with medical experts on new clinical routes, criteria for screening, prepared a list of additional services, and that all this will be officially confirmed in the General Agreement in 2024. For ZZZS, the cooperation with JADECARE and the implementation of the new payment model for CKD was also useful because we learned about a new way of cooperation with the medical profession in the preparation/renewal of the payment model, which we will definitely use in the future.
Interpretation	During the Scope definition process, we examined several studies in the field of the usefulness of preventive activities for the prevention of chronic diseases (mentioned in chapter Available knowledge). We expect that positive effects will also be seen in our case, but only after the completion of JADECARE. The NAWG reports on the successful and effective cooperation of different levels of health care (primary and secondary level) and the payer of health services (ZZZS), which is crucial for the implementation of solutions that actually bring gains for all stakeholders. As for costs, they will initially increase due to additional screenings and additional patient education services. However, research and experience from other settings show that in the long run, investing in preventive activities will reduce treatment costs.
Limitations	As we have already mentioned, in Slovenia we have a legal arrangement in the field of health care and health insurance, which does not allow the complete transfer of Optimedis model, or legal changes would be necessary, but it would not be possible to implement them in the short time of the project. The availability of data should also be mentioned. At ZZZS, we collect data on the health care services provided, their costs, by patient. Extensive analytics is enabled. However, for the interpretation of the analytics, we absolutely need the cooperation of experts from the individual health field, to give it the correct context.
Conclusions	JADECARE made it possible to closely examine the Optimedis model and share experiences with other next adopters. In the field of nephrology, certain improvements have been introduced due to JADECARE. Our goal is to extend the JADECARE experience to other areas (other chronic diseases). Next steps will be: • ZZZS will implement the changes within General Agreement including defined funding mechanisms to integrate care for patients with chronic kidney disease by January 2024. • ZZZS and network of key partners from JADECARE project will implement system level changes to implement care pathway for patients with chronic kidney disease, with defined roles, responsibilities and protocols by January 2024. • A working group established in JADECARE will continue to exist under leadership of ZZZS and will hold the responsibility for activities after JADECARE ends from October 2023 onwards (at minimum until the end of 2025).

	• The working group will develop a plan of activities to support the scaling-up of JADECARE key results in the field of chronic kidney disease management by November 2023. • The working group will develop a plan of activities to support the scaling-up of JADECARE key results in other field of chronic disease management by November 2024.
Other information	**Answer**
Funding	In parallel to the EU JADECARE programme, which mainly funds the exchange of expertise, local activities were funded by: • Slovene Nephrology Society (educational materials, work of nephrology specialists) • ZZZS (budget for additional health care services)