



Surgifit

Real World Example: Surgifit™ & InterSystems IRIS For Health

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By

Health Circuit

Integrated care solutions for sustainable healthcare

Health Circuit: A spin-off company of Clínic Barcelona



Over 20 years of experience in adoption of Digitally delivered Value Based Care services



Funded by:



Funded by the European Union



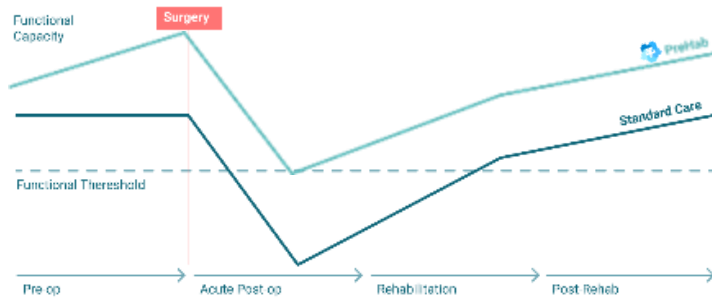
Supported by:



Surgifit™: Digitalizing Surgical Prehabilitation

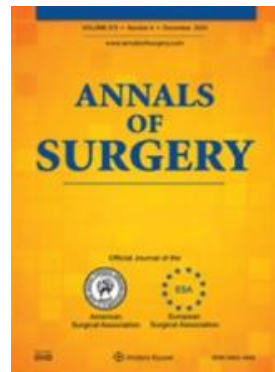


Enhancing patients' functional capacity before surgery...



...to improve outcomes

**-50%
COMPLICATIONS**



Clínica
Barcelona

Pioneer in
Surgical
prehabilitation

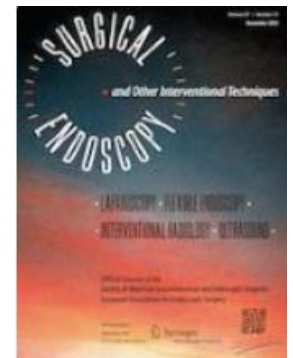
OUR EVIDENCE

www.surgifit.es/en/evidence

**2x TIMES
FASTER
RECOVERY**

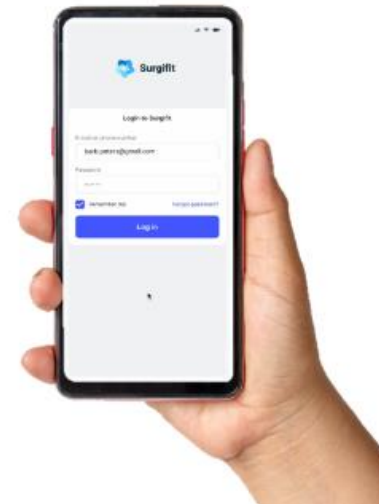


**6x FOLD
REDUCTION
30-DAY
READMISSION**

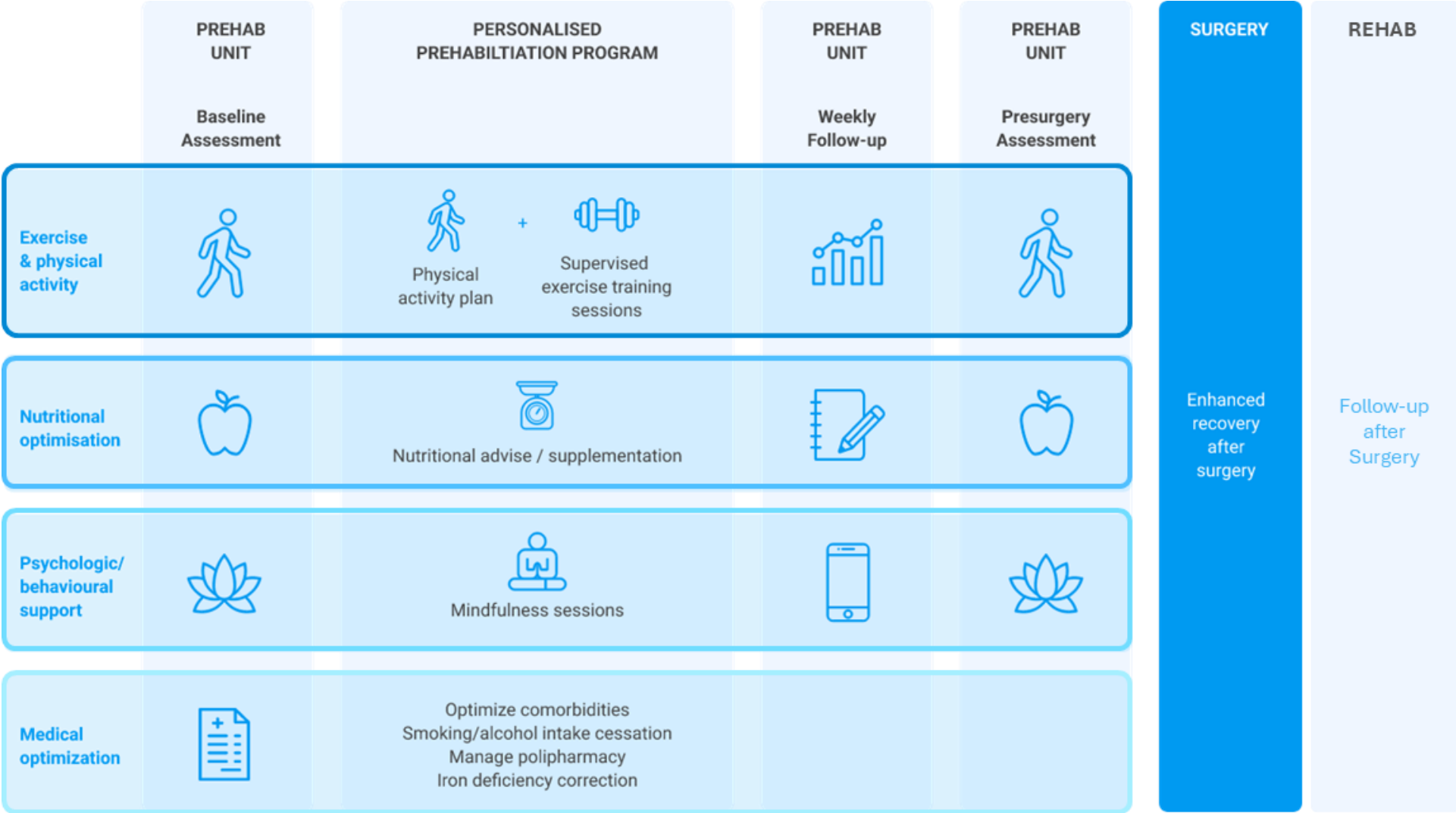


Surgifit

Reference tool
for surgical
prehabilitation



Surgifit™: Digitalizing Surgical Prehabilitation



FOR SURGICAL PREHABILITATION TEAMS



The screenshot shows the Surgifit interface for a patient named Barb Peters. The top navigation bar includes 'My patients', 'Calendar', and 'Health professionals'. Below this, there are tabs for 'Care plan', 'Chat', 'Alerts', and 'Timeline'. The patient's name 'My patients / Barb Peters' is displayed in a blue header, along with details like 'Case manager: Fernando', 'Protocol: PRE-HAB -Trimodal High risk', 'Specialties', 'State', 'Mobile App: Active', and 'Monitoring configuration'. The main content area is divided into 'Dashboard' and 'Activities' tabs. Under 'Activities', there are sections for 'Baseline assessment' and 'Weekly follow-up'. The 'Weekly follow-up' section contains eight activity cards:

- Physical activity promotion** (Physiotherapy, In progress): Today: 6034 steps, Goal: 5000 steps.
- Daily physical activity tips** (Physiotherapy, Not configured): Not configured.
- GYM sessions** (Physiotherapy, In progress): Next: Oct 12, 2022, Not scheduled.
- Nutritional tips** (Nutrition, In progress): Last read: Nutritional tips.
- Weight tracking** (Nutrition, In progress): Last record: 68kg, Not configured.
- Supplementation feedback** (Nutrition, In progress): Not configured.
- Nutritionist follow-up call** (Nutrition, In progress): Not configured.
- Mindfulness sessions** (Psychology, Not configured): Not configured.

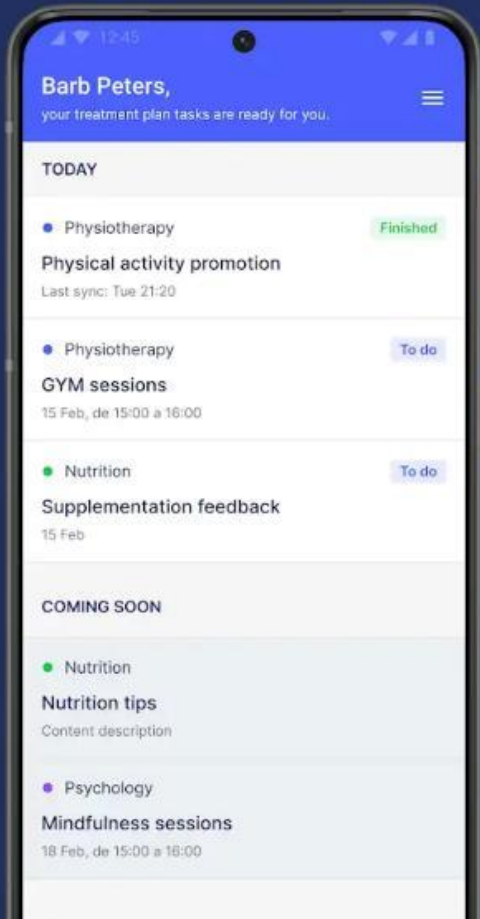
At the bottom, there is a '+ Add activity' button.

**Create
personalized
care plans
upon
evidence-based
treatments
and monitor
their execution
with precision**

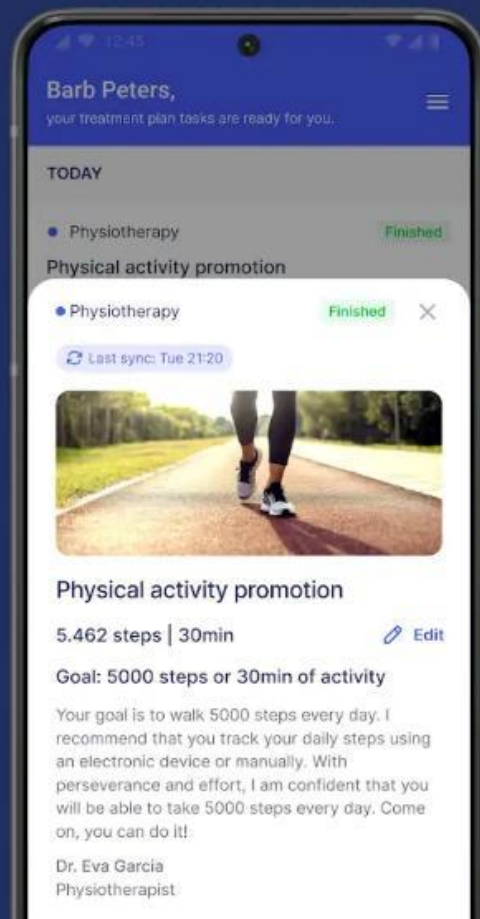
FOR PATIENTS



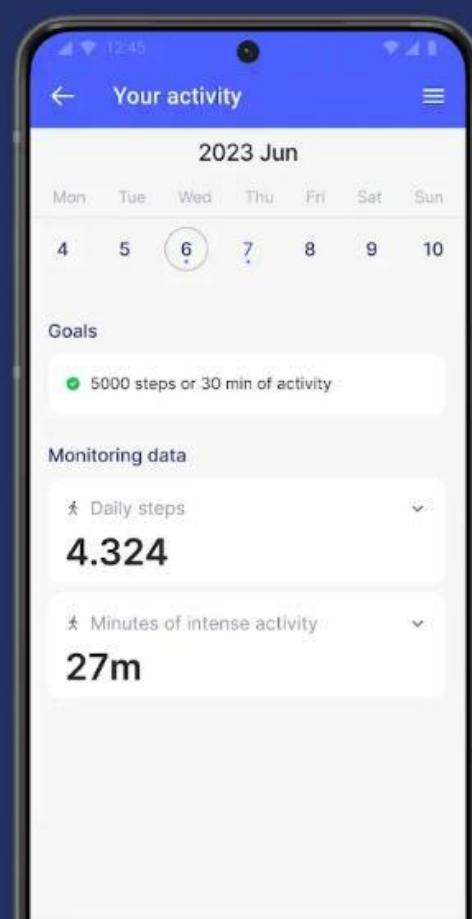
View your treatment plan



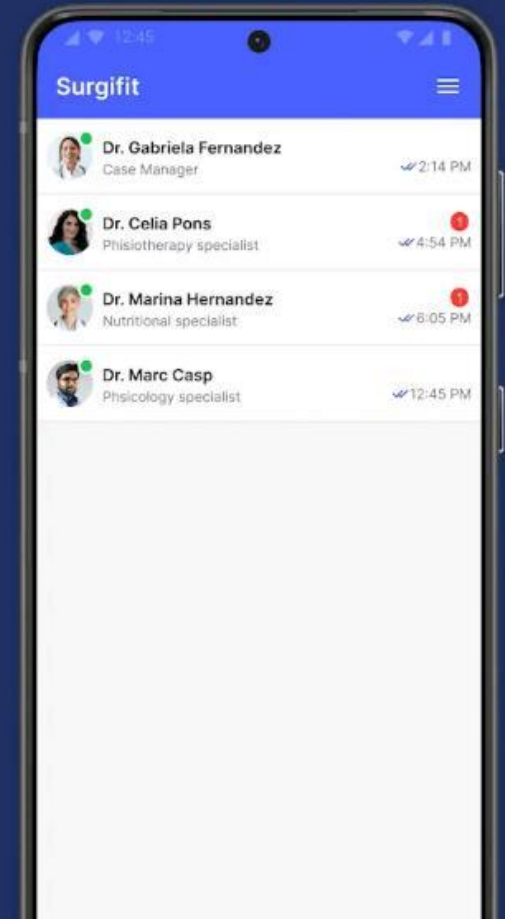
Execute tasks



Synchronize your monitoring data



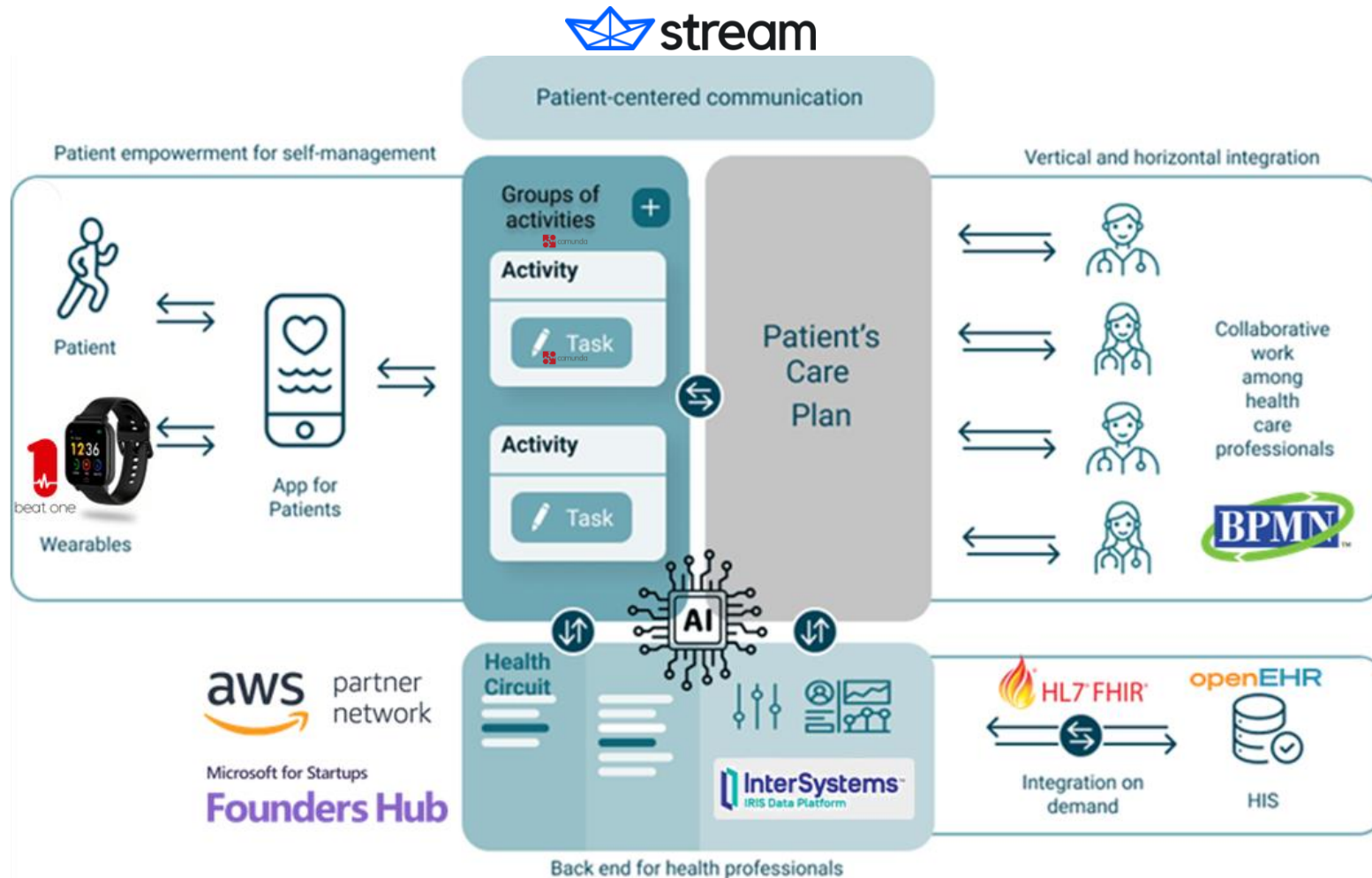
Chat with specialists



Cloud-native Adaptive Case Management SaaS platform



Patients participate in effective health coaching and self-management strategies



FOR PATIENTS



TRACTION

FIRST PILOTS



3 Hospitals



Surgifit

We use the hospital for paid research pilots until getting CE approval during 2026, then we will convert our pilots into customers

Each customer: minimum 10 high-risk licenses per month (to enable small hospitals)

In talks for pilots in seven different countries (as of October 2025)



Q2 2023



**CLINIC
(BARCELONA)**
2025-2027

- Breast cancer (n=180)
- Liver disease (n=30)
- **Universal Prehab (n=800)**

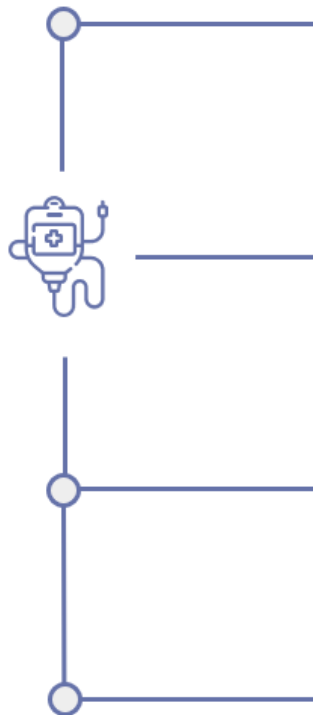
**MANNHEIM
(GERMANY)**
2022-2030

- Bariatric Surgery (n=500)
- **Universal Prehab (n=1500)**
- Major cancer Surgery (n=100)

**Melbourne
(Australia)**
2024-2025

- Lung cancer (ERS) (n=30)

OTHERS TO COME!



FOR PATIENTS



Introducing AI to Surgifit™

AI-supported Shared Decision-Making tool for peri-surgical care





Value-based Hybrid Care Vertical Solutions

The Perisurgical care platform for hospitals

In collaboration with the Surgical Prehabilitation Unit at Clínic Barcelona (Spain) and at Mannheim University Medical Center (Germany)



KHIA+: Enhanced management of Severe Asthma and COPD with genAI

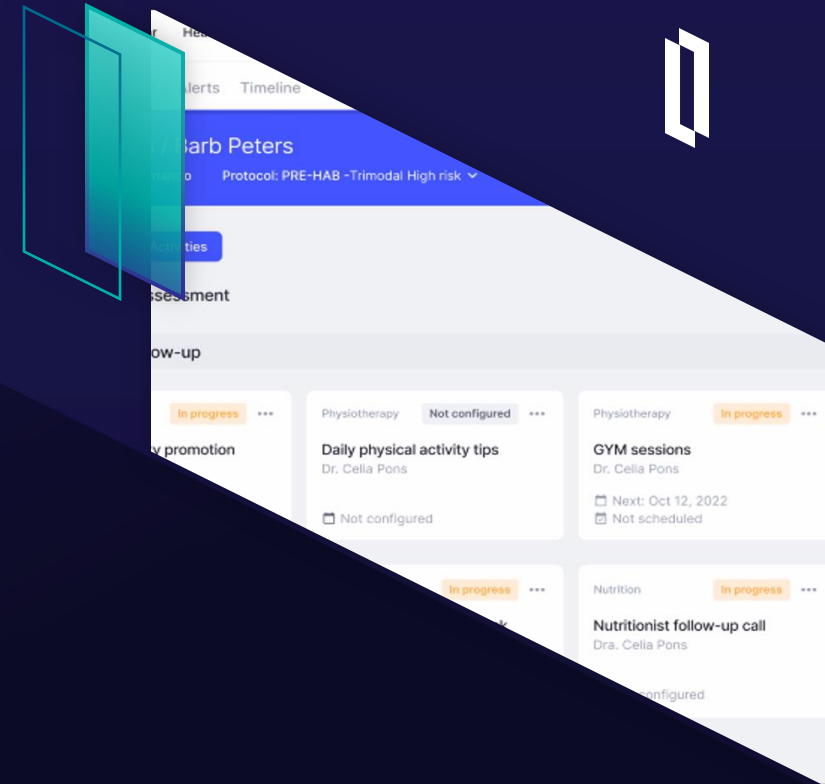
In collaboration with the Pneumology Unit and AISBE at Hospital Clínic Barcelona and Lothar MedTech. EU Funded



www.khiaplus.com/en/

Surgifit™ Use Case

Ad-hoc interoperability with Hospital Information Systems



Challenges

- Need to integrate Surgifit™ cloud solution with hospital workflows
- Hospital data interchange requirements may be different
- Support multiple hospitals
- Security
- Trouble shooting
- Auditing



Key Benefits

- Integrate Surgifit™ cloud solution APIs with multiple hospital workflows
- Flexible to adapt to different scenarios: HL7, APIs, FHIR, OpenEHR depending on hospital requirements
- Multiple tenant solution: different encrypted databases per hospital

Surgifit Use Case

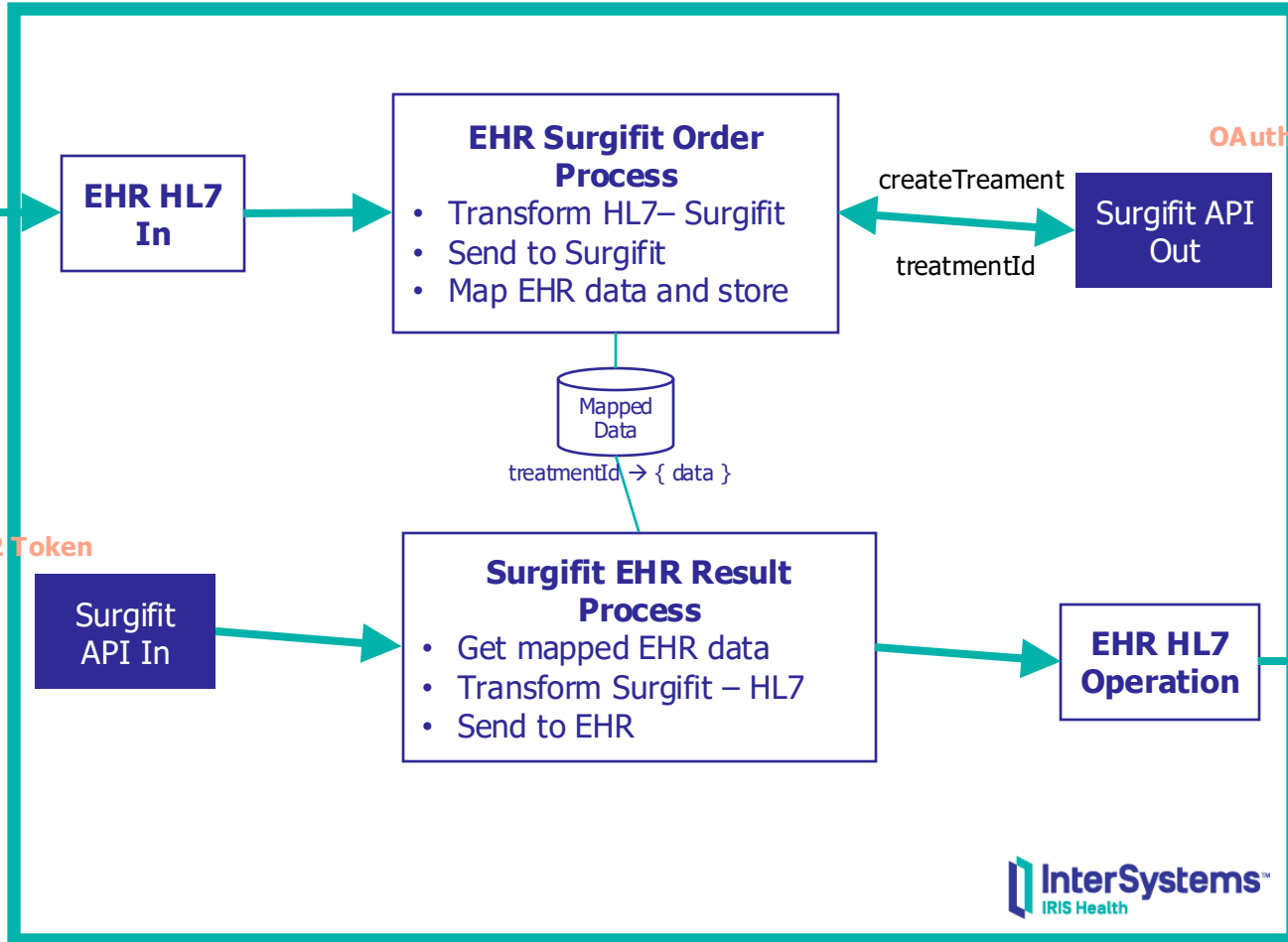


Hospital Electronic Health Record

Worklist	Name	Date of Birth	Gender	Identification	Status	Priority
17/10/2018	Antonio Lopez Perez	1985-11-15	M	100000001	Active	High
18/10/2018	Antonio Lopez Perez	1985-11-15	M	100000001	Active	High
19/10/2018	Antonio Lopez Perez	1985-11-15	M	100000001	Active	High
20/10/2018	Antonio Lopez Perez	1985-11-15	M	100000001	Active	High
21/10/2018	Antonio Lopez Perez	1985-11-15	M	100000001	Active	High
22/10/2018	Antonio Lopez Perez	1985-11-15	M	100000001	Active	High
23/10/2018	Antonio Lopez Perez	1985-11-15	M	100000001	Active	High
24/10/2018	Antonio Lopez Perez	1985-11-15	M	100000001	Active	High
25/10/2018	Antonio Lopez Perez	1985-11-15	M	100000001	Active	High
26/10/2018	Antonio Lopez Perez	1985-11-15	M	100000001	Active	High
27/10/2018	Antonio Lopez Perez	1985-11-15	M	100000001	Active	High
28/10/2018	Antonio Lopez Perez	1985-11-15	M	100000001	Active	High
29/10/2018	Antonio Lopez Perez	1985-11-15	M	100000001	Active	High
30/10/2018	Antonio Lopez Perez	1985-11-15	M	100000001	Active	High



Order
ORM^O01
HL7



OAuth2 Token



OAuth2 Token



Result
ORU^R01
HL7

Hospital Electronic Health Record

Worklist	Name	Date of Birth	Gender	Identification	Status	Priority
17/10/2018	Antonio Lopez Perez	1985-11-15	M	100000001	Active	High
18/10/2018	Antonio Lopez Perez	1985-11-15	M	100000001	Active	High
19/10/2018	Antonio Lopez Perez	1985-11-15	M	100000001	Active	High
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28/10/2018	Antonio Lopez Perez	1985-11-15	M	100000001	Active	High
29/10/2018	Antonio Lopez Perez	1985-11-15	M	100000001	Active	High
30/10/2018	Antonio Lopez Perez	1985-11-15	M	100000001	Active	High

- Surgifit generic components
- Tenant specific components



Surgifit Use Case



InterSystems IRIS Data Platform Management Portal Home Health About Help Logout Menu

Server iris Namespace T-DEMO [Switch](#) User SuperUser Licensed to ISC RE Build Community Key Instance IRIS

Interoperability > Production Configuration - (tenant.demo.interop.Production)

Production Configuration

Start Stop Sort: Name Status Number View: [List View]

Production Running Category: All Legend Production Settings

Services

- EHR HL7 In
- Surgifit API In

Processes

- EHR-Surgifit Order Process**
- Ens.Alert
- Surgifit-EHR Prehab Result Process

Operations

- Alert Email
- EHR HL7 Operation
- Surgifit API Out

EHR-Surgifit Order Process

Settings Queue Log Messages Jobs Actions

Apply Search:

Informational Settings

Comment

Category: EHRToSurgifit

Classname: tenant.demo.interop.bp.PrehabOrderProcess

Description

AdapterClassname

AdapterDescription

BusinessPartner

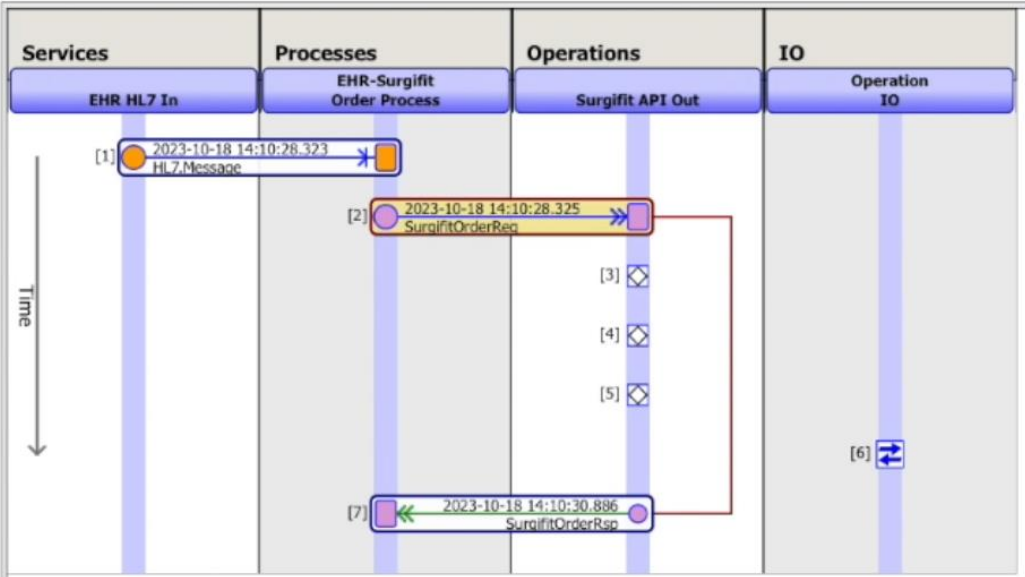
Basic Settings

Surgifit Use Case



VISUAL TRACE

Session ID: 213 | Legend | Printable Version | Go to items (1-7) | Items per page (40) | Show events (checked) | Show internal items (unchecked) | Apply Filter (None) | Previous Page | Next Page | Previous Session | Next Session



```
View Full Contents | View Raw Contents
Expand All
<?xml version="1.0" ?>
<!-- type: surgifit.interop.msg.SurgifitOrderReq id: 159 -->
<SurgifitOrderReq xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:s="http://www.w3.org/2001/XMLSchema">
  <patientData>
    <name>Natasha</name>
    <lastName>Paladino</lastName>
    <lastName2>Lubbar</lastName2>
    <birthDate>1984-03-12</birthDate>
    <email>iris.test+214@localhost.com</email>
    <externalId>124-38-9545</externalId>
  </patientData>
  <caseManagerIds>
    <caseManagerIdsItem>2d3469fe-7d6a-43b4-919b-1aa83cb0e4f2</caseManagerIdsItem>
  </caseManagerIds>
  <protocolId>PREHAB</protocolId>
  <protocolRevision></protocolRevision>
  <specialties>
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      <specialistIds>
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      </specialistIds>
    </Specialty>
  </specialties>
</SurgifitOrderReq>
```

Surgifit Use Case



InterSystems™ IRIS Data Platform Management Portal Home Health About Help Logout Menu

Server iris Namespace T-DEMO [Switch](#) User SuperUser Licensed to ISC RE Build Community Key Instance IRIS

Interoperability > Production Configuration - (tenant.demo.interop.Production)

Production Configuration

Start Stop Sort: Name Status Number View: [List] [Grid] [Table]

Production Running Category: All Legend Production Settings

Services	Processes	Operations
<ul style="list-style-type: none">EHR HL7 InSurgifit API In	<ul style="list-style-type: none">EHR-Surgifit Order ProcessEns.AlertSurgifit-EHR Prehab Result Process	<ul style="list-style-type: none">Alert EmailEHR HL7 OperationSurgifit API Out

Surgifit-EHR Prehab Result Process

Settings Queue Log Messages Jobs Actions

Apply Search:

Informational Settings

Comment

Category

Classname

Description

AdapterClassname

AdapterDescription

BusinessPartner

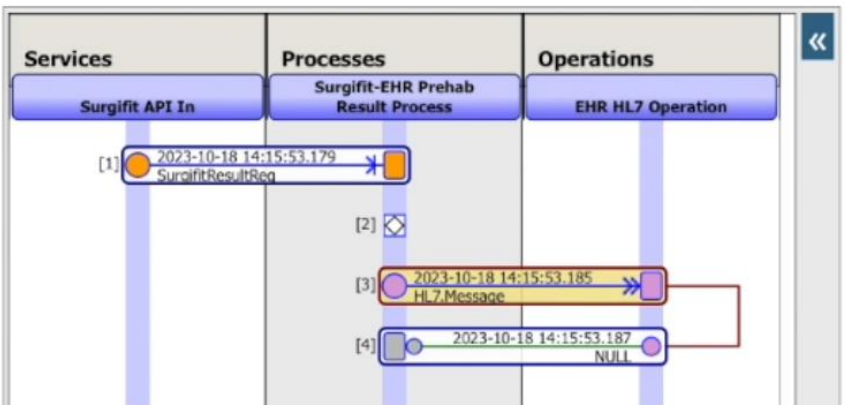
Basic Settings

Surgifit Use Case



VISUAL TRACE

Session ID: 216 | Legend | Printable Version | Go to items (1-4) | Items per page (40) | Show events (checked) | Show internal items (unchecked) | Apply Filter (None) | Previous Page | Next Page | Previous Session | Next Session



View Full Contents | View Raw Contents

HL7 ORU_R01 Message - Id = 39, DocType = '2.5:ORU_R01', Message Type Category = "Unsolicited transmission of an observation message - Unsolicited transmission of an observation message", 6 Segments

1	MSH		^~&		ATOS		SAPCLINIC		20211013182108		ORU ^ R01 ^ ORU_R01		32093232323223		D		2.5							
2	PID				124-38-9545	^	^	^	HIS	^	P	~	RAIX1840312007	^	^	^	ES-CT	^	JHN			RAZZAKI IXTOR	^	CF
3	PV1			O																			XCB419416	
4	ORC		NW		DND817985	^	24774986		24774986		IP						20211013182108		0000082641				ANES]	
5	OBR			DND817985	^	0281562497		ee31d8fa-f4c3-4aaf-af50-daed7829047e	^	0281562497							202110131821							
6	OBX			ED		MODALITAT DEL DOCUMENT	^	Inf_Ini PREHAB									JVBERi0xLjQKMSAwIG9iago8PAovVGI0bGUgKP7/AE							



Surgifit

Thank you

By

Health Circuit

Integrated care solutions for sustainable healthcare