

GILLIE.AI
FOR HEALTHCARE

Artificial Intelligence for Home Care and Care Homes

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www.gillie.ai



Predictive Analytics Revolutionizes Home Care

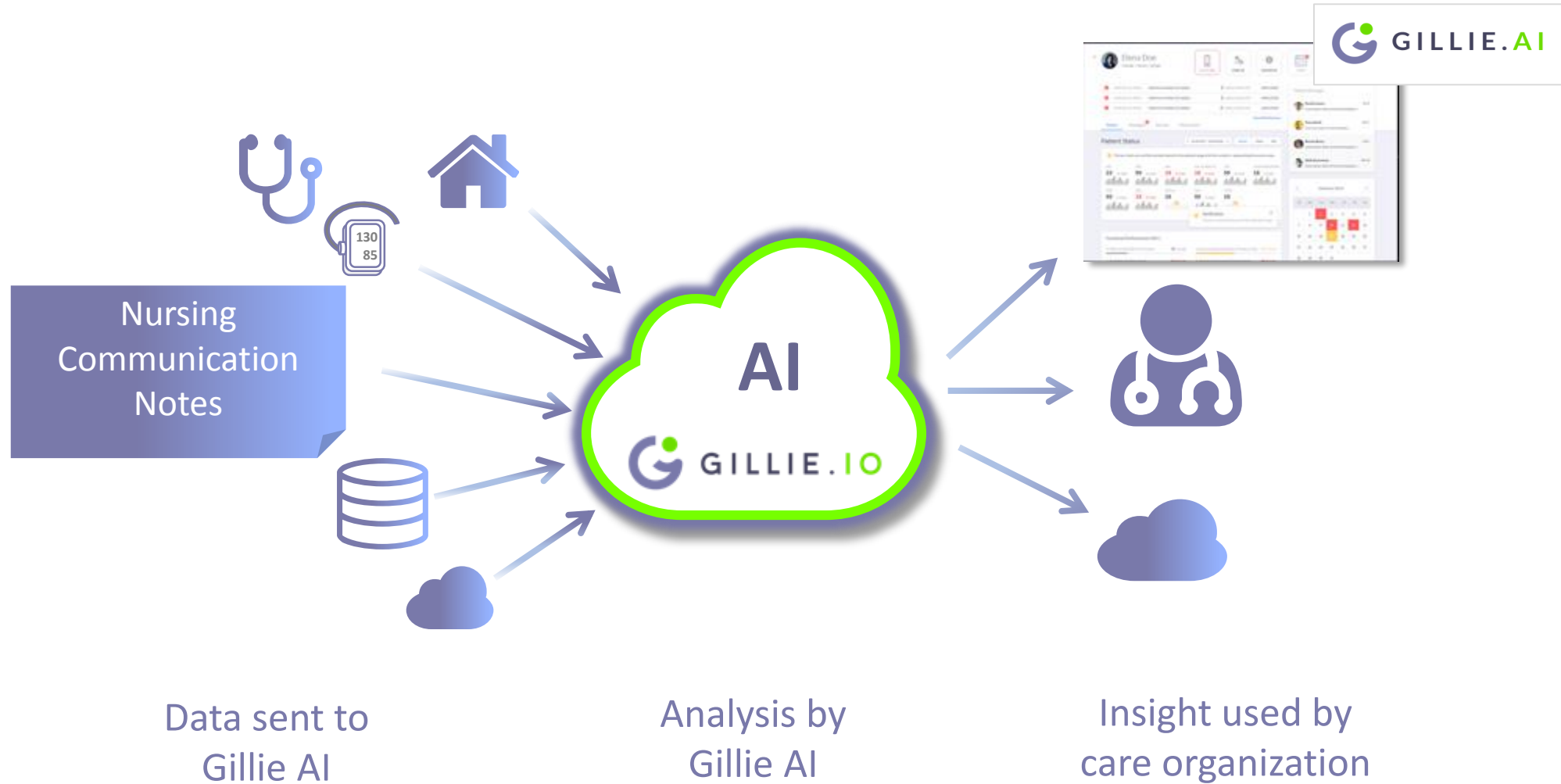
Artificial intelligence predicts changes in customers' health and well-being

Artificial intelligence monitors the condition of customers in home care and helps care providers **anticipate changes in customer's condition**

Artificial intelligence can detect weak signals of changes in the customer's condition and use them to **predict upcoming deviations and events.**

Early intervention in deviations improves customer well-being and reduces the need for care.

Gillie Artificial Intelligence Platform



Home care visit notes → Automatic Care Assessment

Insights provided by Gillie analytics can be used in continuous care assessment

A. General

1. Priority Level of Help Needed (MAPLe)
2. Risk for Emergency Care

B. Physical capability

1. Physical Activity
2. Instrumental Activities of Daily Living (IADL)
3. Activities of Daily Living (ADL)
4. Home Environment
5. Risk for Institutionalized Care

C. Cognition/ mental health

1. Cognitive Performance (CPS)
2. Aggressive Behavior (ABS)
3. Depression (DRS)
4. Cognitive Loss
5. Delirium
6. Communication Difficulties
7. Mood
8. Inappropriate Behavior
9. Abusive Relationship

D. Social Life

1. Social Activity
2. Social Isolation

E. Health

1. Falls
2. Pain
3. Pressure Ulcer
4. Undernutrition
5. Dehydration
6. Feeding Tube
7. Missing Measurements
8. Smoking / Alcohol usage
9. Urinary Incontinence
10. Bowel Condition

F. Diabetes

1. Skin Infections
2. Wounds
3. Problems with Vision

G. Medication

1. Side Effects of Medication
2. Medicine Intake

H. Heart/ breathing problems

1. Heart problems
2. Speech problems
3. Cough
4. Swelling
5. Chest Pain
6. Breathing Problems
7. Dizziness

Structures the following measurements from text – or if available, from a device

1. Blood Glucose and Insulin intake
2. Weight
3. Body Temperature
4. Blood Pressure
5. Catheterization
6. INR

Finland uses
RAI assessment
for elder care

interRAI is an international collaborative to improve the quality of life of vulnerable persons through a seamless comprehensive assessment system.

General view of Gillie AI - List of patients in priority order

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Gillie Master
KAUNISJÄRVEN KU...

Persons
Devices
Tasks
Analysis
Change view
Help

Sort by priority +

Requires immediate reaction

Bed Vitaly	Wi-Fi, U, U, +4	Ross Betty	Tamp, Tiim, Espo, +1, +1
Smith Alex	Tiimi2, Tiimi1, +1	White Anne	Tampere, +1

Requires a reaction within 3 days

Skinner Emma	+1, +1, +1	Testilä Veikko	
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No action required

Aalto Anna Maria			
Aalto Anna Maria			
Aalto Demo Anna Maria			
Alfa Anni	Espoo, Tampere, Turvakielt...	+1	+ New Person

Patient view

Indicates relevant notifications of the patient

- Persons
- Devices
- Tasks
- Analysis
- Change view
- Help

← Vitaly Bed

0 2 3

Basic information

Service need (MAPLe) **5** Risk for emergency room visit

Physical performance

Home maintenance needed Risk of institutional care

Index of Activities of Daily Living (ADL) **16** Instrumental Activities of Daily Living (IADL) Scale **9**

Mental performance

Cognition Communication

Depression Inappropriate behavior

Depression Rating Scale (DRS) **5** Aggressive behavior (ABS) **4.5**

Loneliness

Health

Dehydration Urinary incontinence

Health stability (CHESS) **1**

Diabetes

Vitals

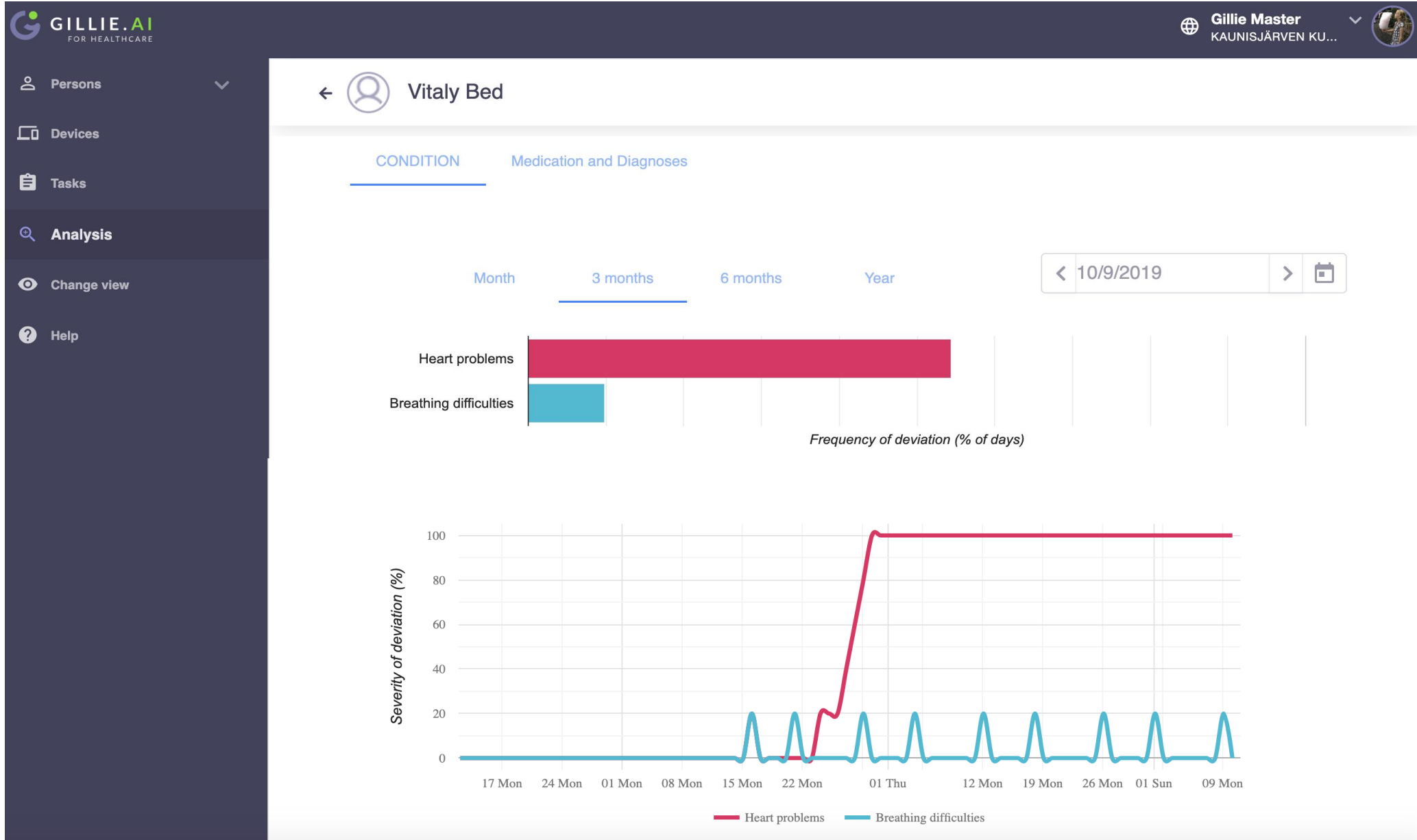
Systolic blood pressure **129.5 mmHg** Diastolic blood pressure **79.8 mmHg**

Heart rate **60.6 per minute** Respiration rate **12.2 per minute**

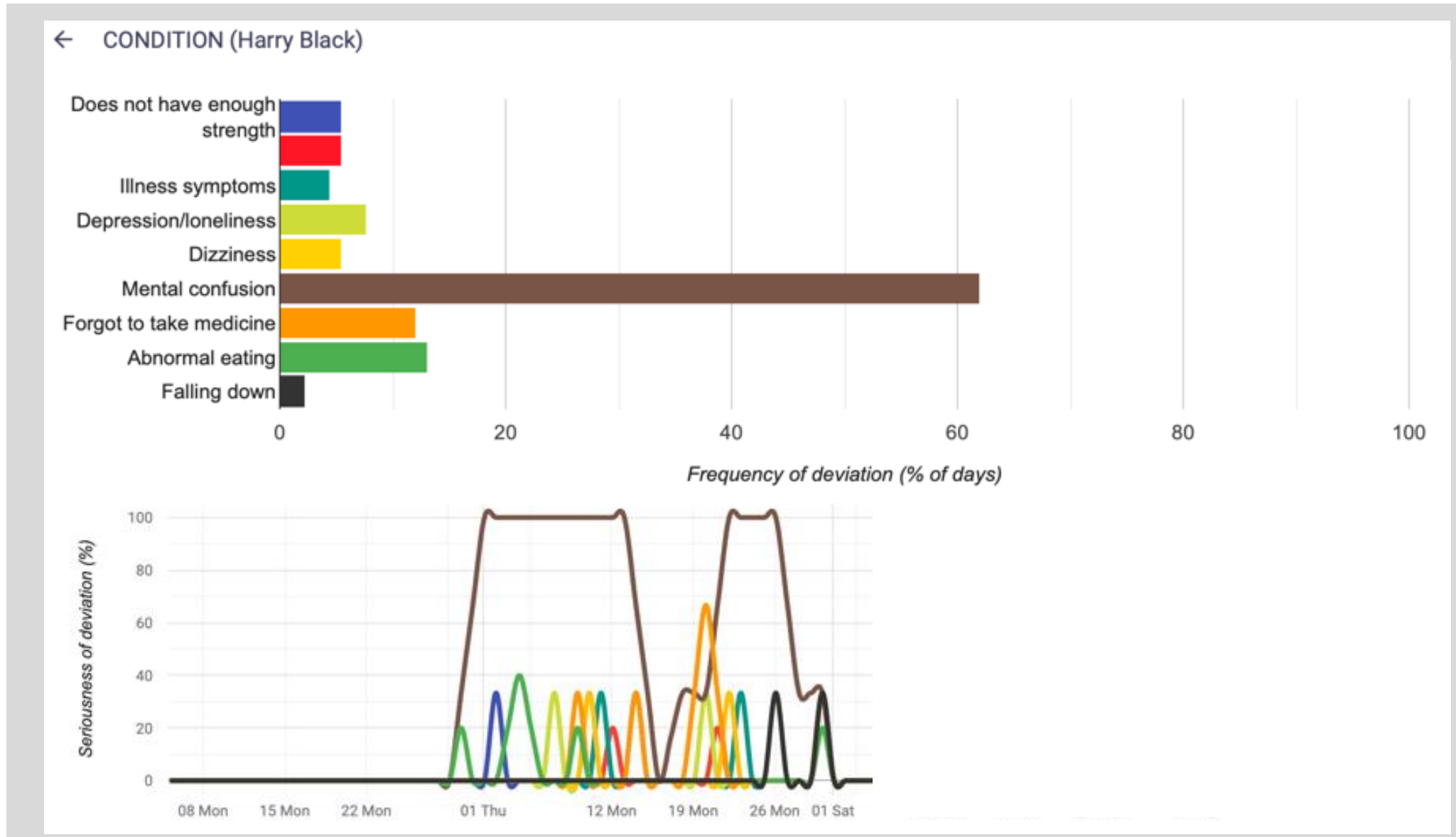
Medication

Cardiorespiratory fitness

Analysis view – Example 1



Analysis view – Example 2



Customer SiunSote: North Carelian Social and Health Care Service District

Tomi Tikkanen, SiunSote, Development Specialist

When our employees have written the reports, the Gillie AI software goes through the text and draws different types of conclusions based on it. Our home care employees' daily work is now easier. Without this kind of an intelligent platform, it would be impossible to do these things."



Customer: Hospital District of South Ostrobothnia



Hospital District of South Ostrobothnia

“ The aim is to recognize, as early on as possible, any changes in health and the ability to function that make living at home more difficult. Gillie’s artificial intelligence analyzes visit entries and highlights any deviations, e.g. depression, dizziness, changes in activeness.”

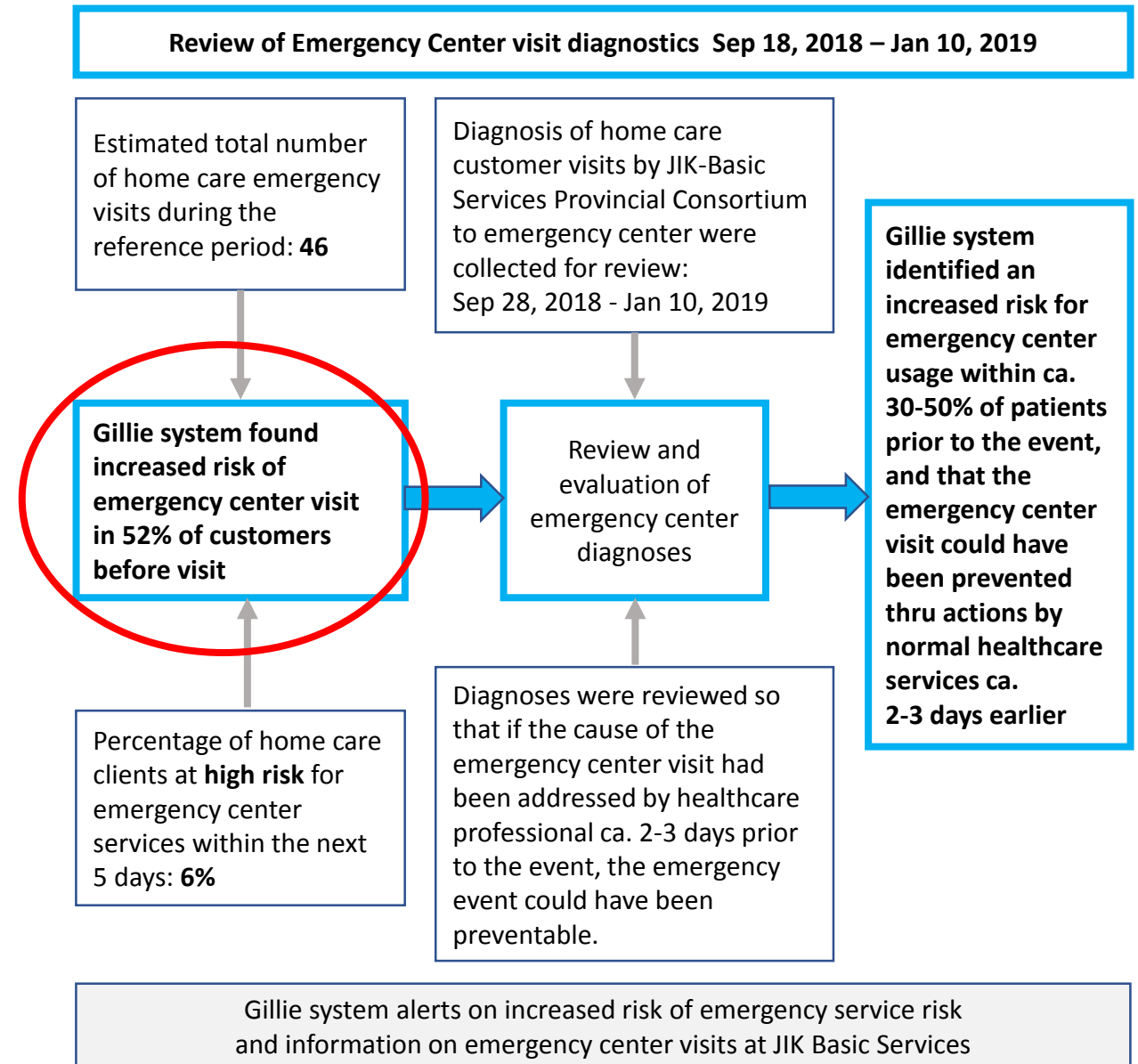
*Research study by
Southern Ostrobothnia Hospital District
June 6th, 2019*

Saving potential for home care development

Conclusions

....Southern Ostrobothnia Hospital District could save on primary care costs and emergency care treatment costs about **€ 75,000 - € 550,000** and specialist medical care costs and about **€ 250,000 - € 1,080,000** per year.

....given the applicability of the Gillie system to other areas of activity beyond demonstrating the risk of emergency center visit, **the real potential**, for example in terms of cost savings in healthcare, **is likely to be significantly higher.**





Gillie AI is a unique solution for Home Care and Care Homes



Gillie IPR based Artificial Intelligence analytics



Gillie AI is trained and validated with real customer data



Gillie AI can be used as a Service



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