Maccabi Healthcare Services

CONNECARE

From Connected Care to Integrated Care: A Work In Progress

CONNECARE – Assuta - Maccabi

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HOSPITAL ASSUTA RAISING HEALTH STANDARDS

- **One of the most problematic interfaces, with perhaps the greatest chance for catastrophic consequences due to lack of communication and coordination, is the hospital-community care interface.**

- **In the US nearly one in five Medicare patients discharged from a hospital—approximately 2.6 million seniors—are readmitted within 30 days, at a cost of over $26 billion every year.**

- **When effectively performed, transitions of care present an opportunity to decrease patient suffering, reduce complication and lower the cost of care**

- **"Integrated Care" purports to address the problem, although, to date, a comprehensive solution has not yet been achieved.**

Mur-Veeman, I., Van Raak, A., & Paulus, A. (2008). Comparing integrated care policy in Europe: Does policy matter?. Health Policy, 85(2), 172-183

Kearns, P., Reinkirg, C. (2013). Predicting the risk of hospital readmission,,Medicine, El Camino Hospital, Mountain View, US. Doi10.1016 j.ejm 2013.o8 660

Ouwens, M., Wollersheim, H., Hermens, R., Hulscher, M., & Grol, R. (2005). Integrated care programmes for chronically ill patients: a review of systematic reviews. International journal for quality in health care, 17(2), 141-146.

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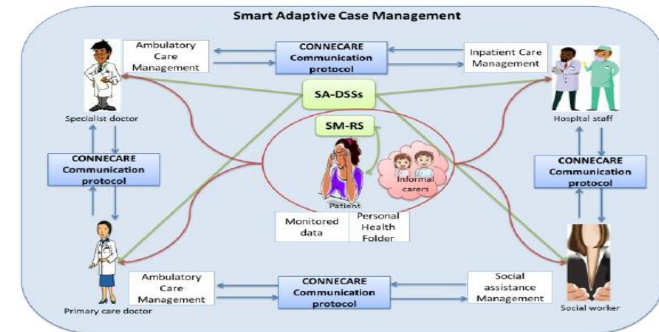


Personalised Connected Care for Complex Chronic Patients

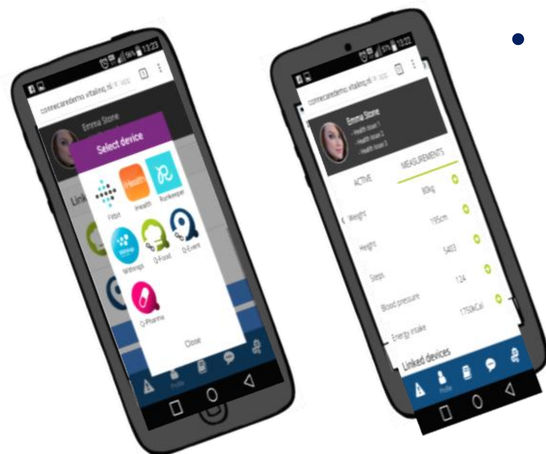
Horizon 2020 Research and Innovation Project

CONNECARE aims to develop and deploy a new model for ICT supported Integrated Care for Complex Chronic Patients that will address the Hospital-Community Divide

A Digital Health Platform

2 Major ICT Components

- **Smart Adaptive Case Management (SACM) for professionals**
    - **Adaptive planning of clinical processes tailored to each patient**
    - **Collaborative management of all involved actors in each step**
    - **Management of patient's information to better handle her/his case**
    - **Decision support to clinicians in each step of the process**



- **Self-Management System (SMS) for patients**
    - **Patient's monitoring (e.g., health status, activities, next tasks)**
    - **Interaction and communication between patient and professionals**
    - **Smart support to training, recommendations and alerts**

PATIENTS

CDSS for Personalized Pathways

Monitoring and self-management

Digital Health Framework (including ACM)

New Integrated Care Model (supported by ICT)

NETHERLANDS

ISRAEL

SPAIN

Deployment Clinical Trials and Implementation Studies

The CONNECARE "System" will be implemented in 3 Countries; Spain, Israel and the Netherlands

CONNECARE

Some of the building blocks for the new Integrated Care Model are already in advanced stages of implementation by some Consortium Partners

ASSUTA ASHDOD

A COMMUNITY THAT HAS A HOSPITAL

The first public hospital built in Israel in 40 years – opening in June 2017

ASHDOD HOSPITAL
ASSUTA
RAISING HEALTH STANDARDS

INTEGRATED CARE VISION

"A Community that has a hospital"

- Innovative, advanced general public hospital, affiliated to a medical school
- Full integration with the community's medical services, meeting the special needs of the patients and their families, both within the hospital and at home
- Integration with Social Services and other support services in the municipality
- All 4 HMOs in Israel have agreed to participate in this model
- The Municipality and the Department of Social Services are committed to this vision

System for Insuring Seamless Information Exchange Between the Hospital and the Community

Patient
PHR

EHR
INTEROPERABILITY

Transfer and Exchange of Information -PROBLEM LIST

Transfer and Exchange of Information -PROBLEM LIST

System for data exchange Between EMRs

EMR
Hospital

EMR
Community

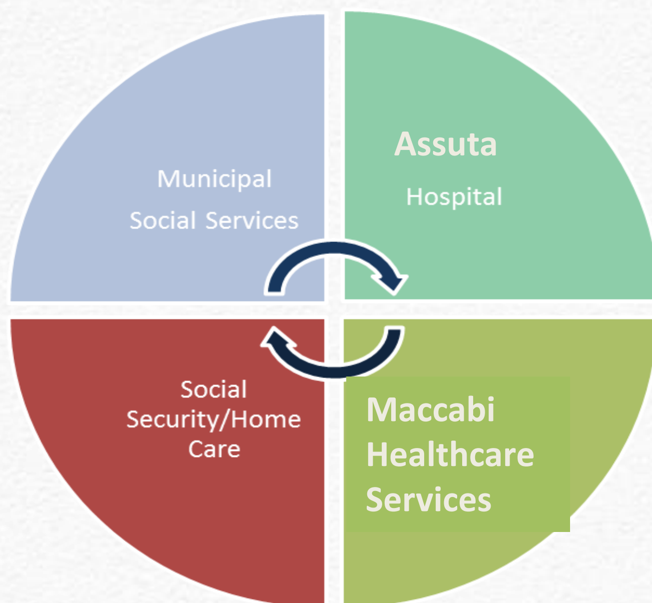
HOSPITAL

COMMUNITY

Coordinate Discharge

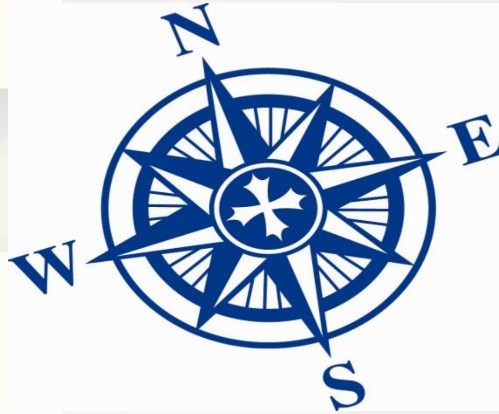
UNIVERSITY HOSPITAL Assuta Ashdod TAKING CARE OF THE COMMUNITY

PARTNERS



Basic Principles

- Communication among Partners
- Technology Infrastructure Telecare
- Appropriate and Timely Monitoring
- Real time Data Flow Enabling Decision -Making



“Compass”
Continuity of Care Program
Integrating the Hospital - Community Transition

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Integrated Transitional Care for All Complex Patients Discharged from Hospital

The Compass Program

- 5 Regional Compass Units
- 700 monthly referrals
- One address for all community providers
- Multidisciplinary staff

Compass Overview

- A care framework for complex patients in the community in partnership with the primary care doctor
- Coordination of care among all community providers
- Initiate contact with the patient within 48 hours
- Home visit when needed

At Risk population

- Proactive identification of the population
- Development of an intervention plan according to patient needs

Mental Health

- Intervention plan from hospital discharge until absorption of the patient in mental health services in the community
- The staff includes nurses and social workers with mental health expertise
- The staff coordinates and provides care, according to need

Project Goals

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Assure Continuity of Care

For Patients discharged from hospital to the community

Improve Quality of Care

For complex patients at risk of deterioration and repeat hospitalizations

Standardize Work Processes

Care for Complex patients with emphasis on Home care services

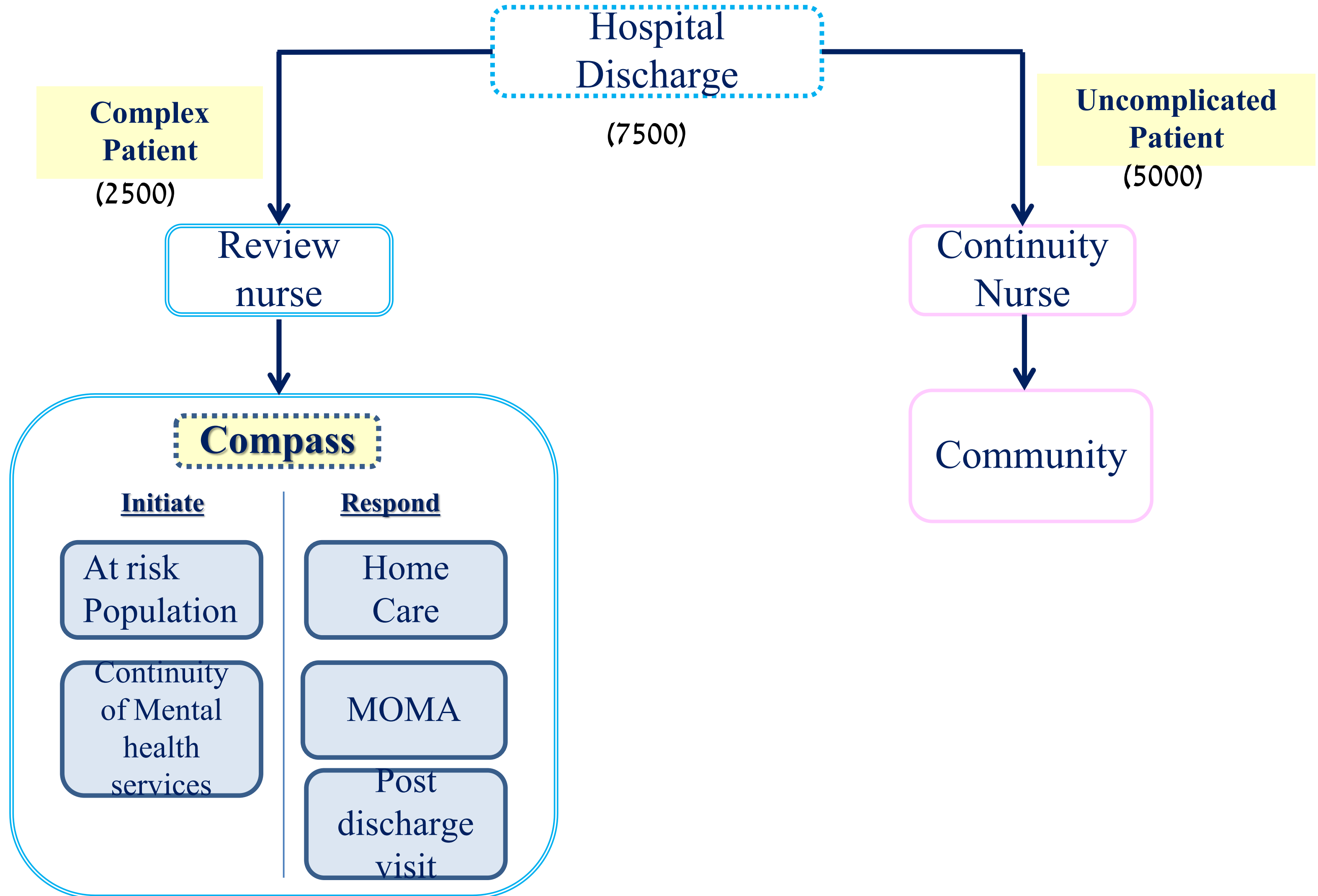
Improve the Service Experience

For the patient, the family and the caregiver

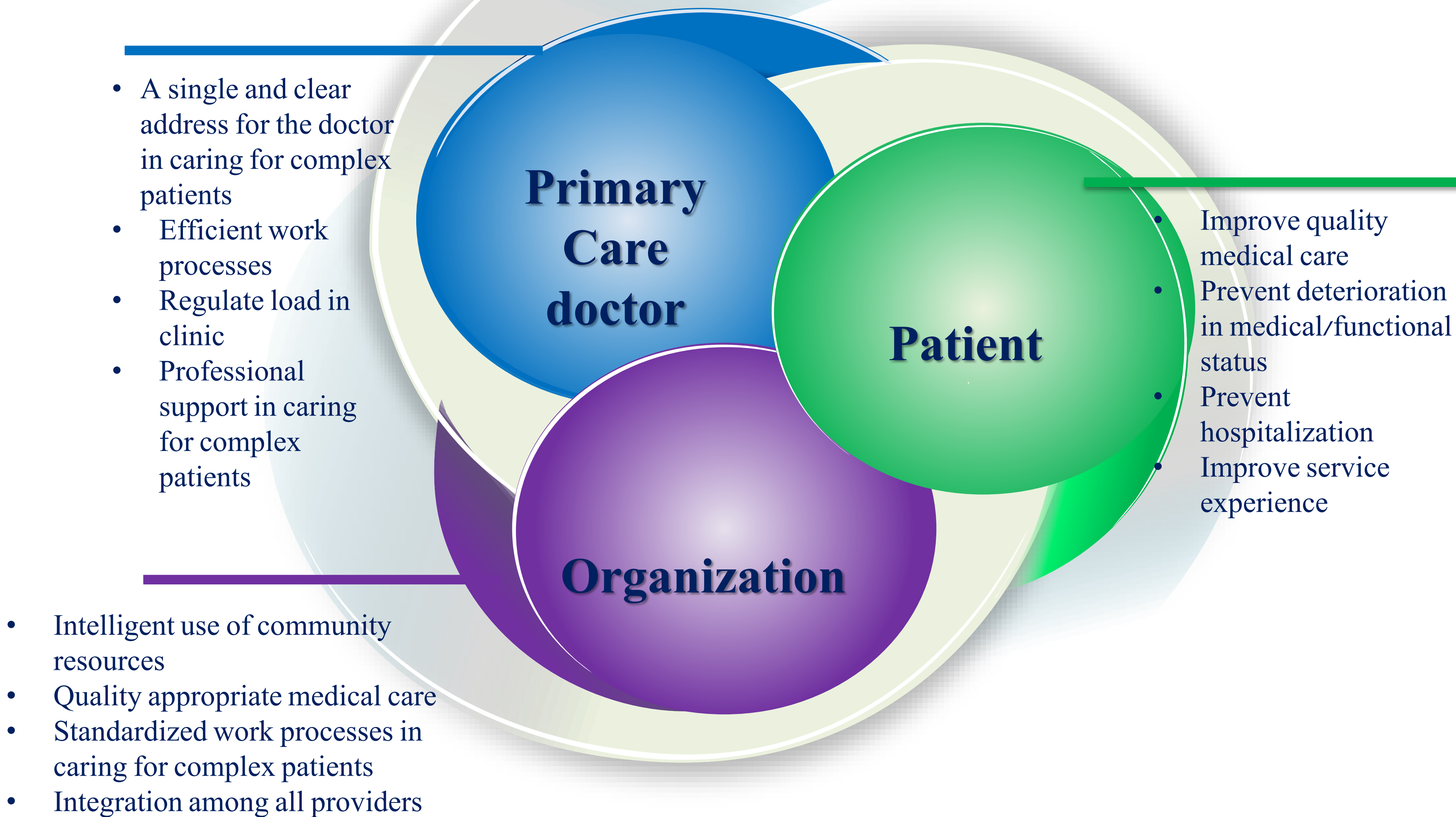
Intelligent Use of community Resources

Prevent duplication in coordination and care

Continuity of Care Model



The Added Value



System Architecture

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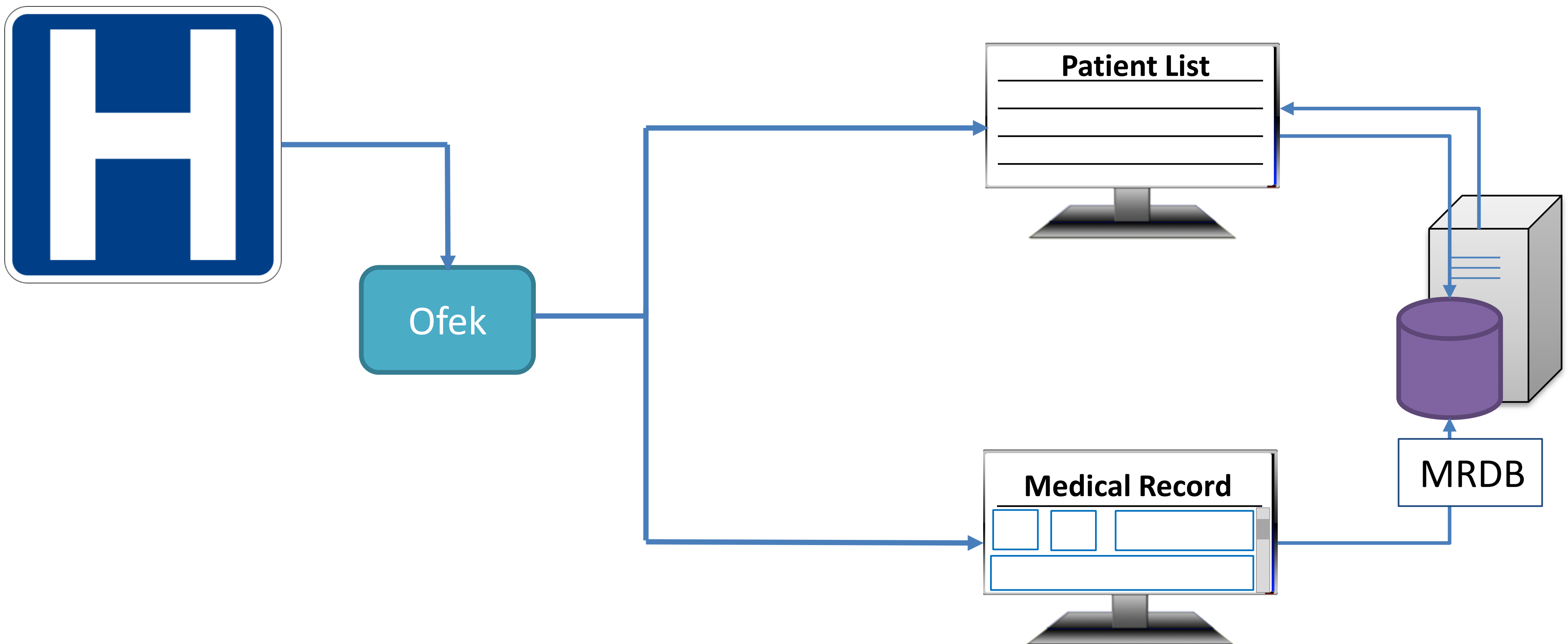

ביקור אחות

עדכון אחרון 10:04 12/06/2016 אומדני רצף

מספר ביקור: 14

שם אח/ות:

התמחות: אחות

תאריך ביצוע: 12/06/2016 שעת ביצוע: 10:04

Post Hospitalization estimation

Release Date 02/09/2015 hospitalization Reason ----------------------

	.	Details
Socio-demographic details update needed	☐	
Medical release letter	☐	
Nursing release letter	☐	
Support and care system exist	☐	
Recommendations for medication changes	☐	------------------------------------
Continuing Care needed at Nurse's clinic	☐	------------------------------------
Reference for further multidisciplinary treatment	☐	------------------------------------

Result : ---

תוצאה: הופנה למתאמת שירות
תאריך שחרור: 01/09/2015
סיבת אשפוז: אלקטיבי
בוצע בתאריך: 03/09/2015 ע"י: אתי שחף

Home Care suitability

	YES	No
Able to leave his home	☐	☐
Support and care system exist	☐	☐
Complex treatments Needed	☐	☐
High frequency treatment needed	☐	☐

Result --

Previous Result ------------------------------ **Date** ---------- **Estimated by** ------------------------------

✓ **Pain assessment**

✓ Assessment of potential for falling in the elderly

✓ **Compliance with medication regimen**

Tasks Coordination

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Doctor

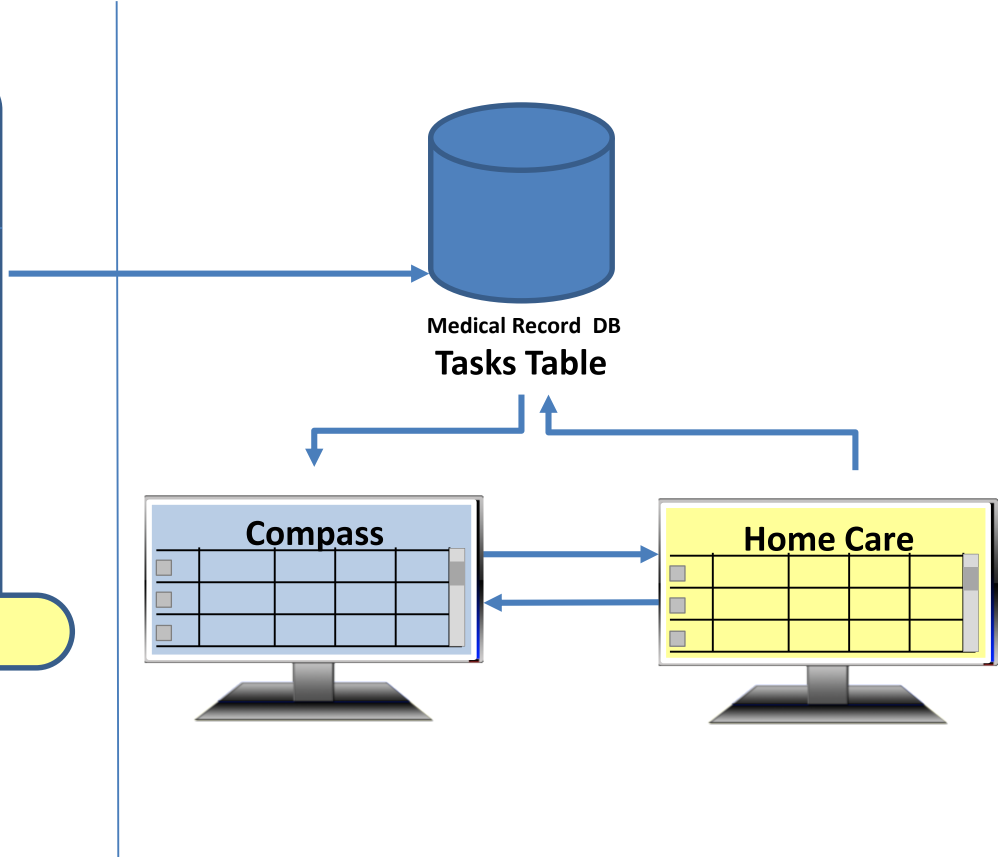
Nurse

Hospital

Compass Assesses and coordinates

- ☑ Home care unit
- ☐ Stoma
- ☐ IV
- …

es



RESULTS

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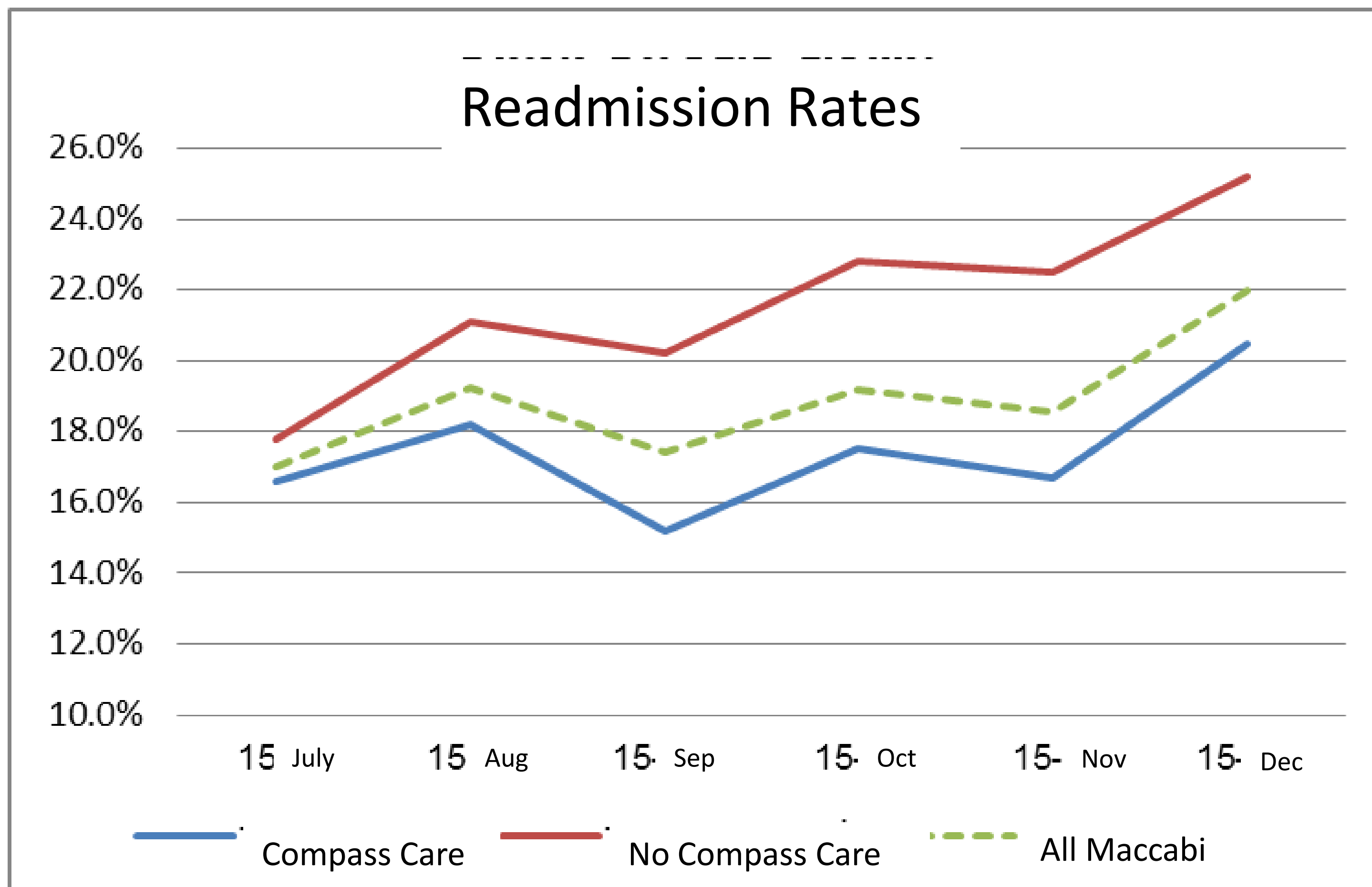

RESULTS

July-Dec 2015

No Contact Readm	Compass Care readm	% Contacted	Percent Hospitalizations	Hospitalizations /1000	Region
19.0%	17.3%	64.6%	17.9%	7.9	J'slem-Valley
20.3%	18.2%	68.8%	18.9%	7.6	Sharon
26.0%	19.3%	67.7%	21.4%	7.1	Center
22.8%	16.2%	64.3%	18.5%	9.2	South
20.4%	16.5%	62.6%	17.9%	10.2	North
21.5%	**17.5%**	**65.5%**	**18.9%**	**8.3**	**TOTAL**

Patients receiving integrated transitional care by Compass Units had 4% fewer readmissions

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Costs - 6 months pre and post Intervention

Avg cost/month								
Total costs	Mac Clinics	Pvt clinics	Drugs	Hospital	Dr visits	Number	Population	
₪ 2,392	₪ 77	₪ 153	₪ 589	₪ 1,335	₪ 164	13,480	No Intervention	
₪ 4,427	₪ 213	₪ 316	₪ 643	₪ 2,966	₪ 163	6,490	Pre intervention	Home visit only
₪ 3,439	₪ 239	₪ 306	₪ 668	₪ 1,964	₪ 155		Post intervention	
-22%	12%	-3%	4%	-34%	-5%		Percent Difference	
₪ 2,863	₪ 95	₪ 196	₪ 498	₪ 1,778	₪ 200	648	Pre intervention	Doctor Clinic only
₪ 2,348	₪ 95	₪ 191	₪ 557	₪ 1,217	₪ 191		Post intervention	
-18%	0%	-2%	12%	-32%	-4%		Percent Difference	
₪ 5,207	₪ 223	₪ 302	₪ 734	₪ 3,575	₪ 215	760	Pre intervention	Home Visit + Doctor Clinic
₪ 4,221	₪ 267	₪ 363	₪ 784	₪ 2,444	₪ 210		Post intervention	
-19%	20%	20%	7%	-32%	-3%		Percent Difference	

Reduction of hospital costs of 32% for complex co-morbid patients receiving integrated transitional care

Assuta Ashdod University Hospital: Building a Future Together

Assuta Ashdod will open its doors in this Summer

CONNECARE will be implemented in Assuta and Maccabi in the Fall

Assuta Ashdod Hospital

CONNECARE

Community-Maccabi

UNIVERSITY HOSPITAL Assuta Ashdod TAKING CARE OF THE COMMUNITY

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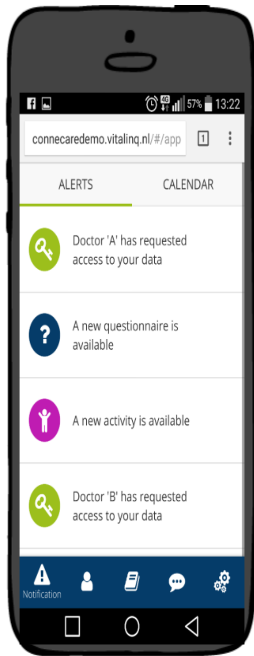
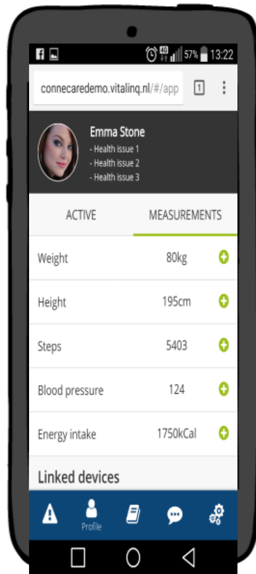
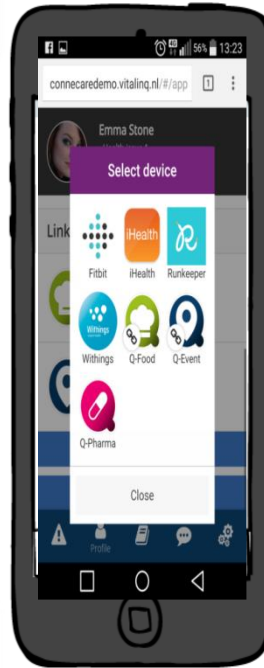
Patient Self Management System







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The CONNECARE pilots in Israel, Catalonia and the Netherlands will enable a robust evaluation of the integrated care model, thus providing the foundation for a potentially transferable solution

Some Concluding Insights

- The journey from connected care to integrated care requires a cultural transformation
  - Patient Centered Holistic Approach
  - Commitment to eliminating organizational barriers
  - Hospital and Community health and social care staff are one inseparable team
- All of the partners need to work together to put new work and communication processes in place
- ICT is a crucial enabler – not only for transfer of information – but for ongoing collaboration and integration
- Despite the heterogeneity of different healthcare systems, medical and healthcare professionals' behavior and attitudes and the basic processes required for integration are surprisingly similar
- Patients and their families are ultimately the true integrators in the long run– they need to be a recognized part of the healthcare team

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Thank You!