

# Clinical Analytics



# Clinical Analytics – current functionality

Claims



1010  
10101  
01001  
1010

Psychosocial data



1010  
10101  
01001  
1010

EHR



1010  
10101  
01001  
1010

ADT



1010  
10101  
01001  
1010

Admin and finance data



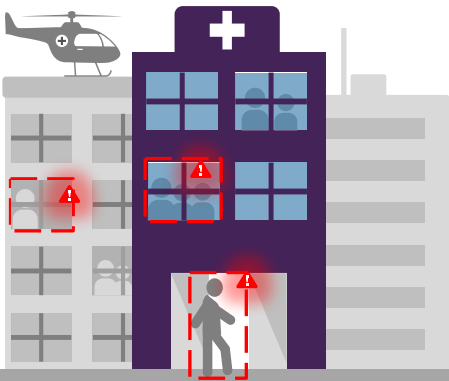
1010  
10101  
01001  
1010

Patient-generated data



1010  
10101  
01001  
1010

## Patient population: High utilizers prediction



## Risk Stratification

Readmission	
Comorbidity	
9 mo. mortality	
Diseases	
Sepsis	

Sepsis Risk	
High	J Cooper
Medium	G Kim
Low	M Smith
High	C Loya
Low	



## Discharge plan

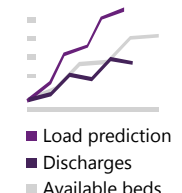
SEPSIS RISK: Medium		Recommended Treatment
Risk factors	Modifiable risk	Discharge date
Smoking status	-5	
Medicine Compliance	+2	
Dietary Adherence	-8	

## Discharge planning



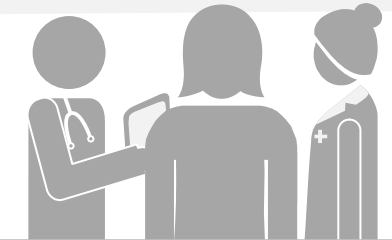
- Low risk
- Med. risk
- High risk

## ED load prediction



## Workforce planning: Q3, 4<sup>th</sup> of July weekend

- Pediatricians
- Orthopedic surgeons
- Cardiologists
- Nurses
- Oncologists



## Predict population risks

- Predict cost and utilization trends based on past data
- Identify high utilizers to enable more proactive care
- Risk stratify patients based on future health outcomes

## Reduce clinical variance

- Pinpoint utilization drivers across network of hospitals
- Benchmark and optimize care quality measures and cost drivers across hospitals and processes

## Optimize care for each patient

- Identify modifiable risk for each patient
- Prescribe care guidelines based on outcomes of similar patients

## Improve discharge approach

- Prioritize discharges based on risk stratification
- Improve the care transition process to reduce the likelihood of readmission, mortality etc.

## Streamline patient flow

- Predict traffic to improve bed management
- Schedule the right people across your network
- Reduce cost with more efficient planning

# Clinical Analytics – future scenarios

Claims



1010  
10101  
01001  
1010

Psychosocial data



1010  
10101  
01001  
1010

EHR



1010  
10101  
01001  
1010

ADT



1010  
10101  
01001  
1010

Admin and finance data



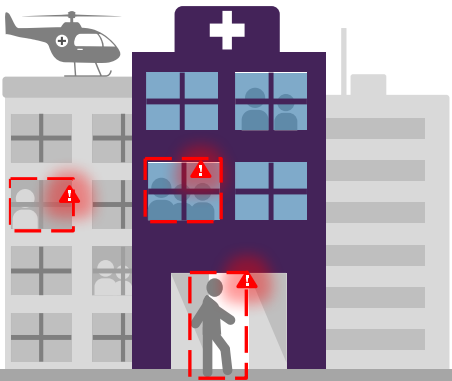
1010  
10101  
01001  
1010

Patient-generated data



1010  
10101  
01001  
1010

## Patient population: High utilizers prediction



## Risk Stratification

Readmission		<b>Sepsis Risk</b>	
Comorbidity		<b>High</b>	J Cooper
9 mo. mortality		<b>Medium</b>	G Kim
Diseases		<b>Low</b>	M Smith
<b>Sepsis</b>	→	<b>High</b>	C Loya
CHF		<b>Low</b>	
Diabetes			
Cancer			

Display modifiable risks



## Discharge plan

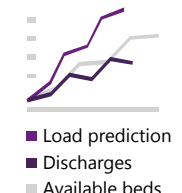
<b>SEPSIS RISK: Medium</b>		<b>Recommended Treatment</b>
<b>Risk factors</b>	<b>Modifiable risk</b>	✓
Smoking status	-5	<b>Discharge date</b>
Medicine Compliance	+2	
Dietary Adherence	-8	

## Discharge planning



- Low risk
- Med. risk
- High risk

## ED load prediction



## Workforce planning: Q3, 4<sup>th</sup> of July weekend

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