

AI til forebyggelse af komplikationer efter tarmkræft



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Udfordringen!

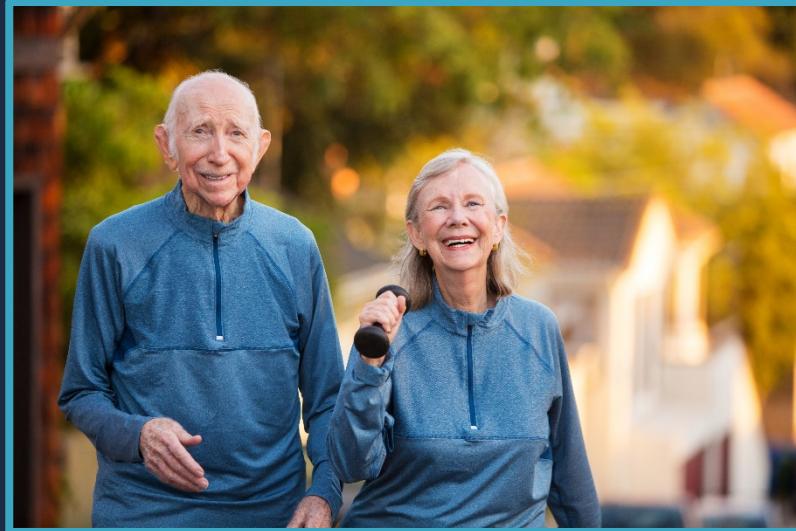


State of the art inden for tarmkræft behandling

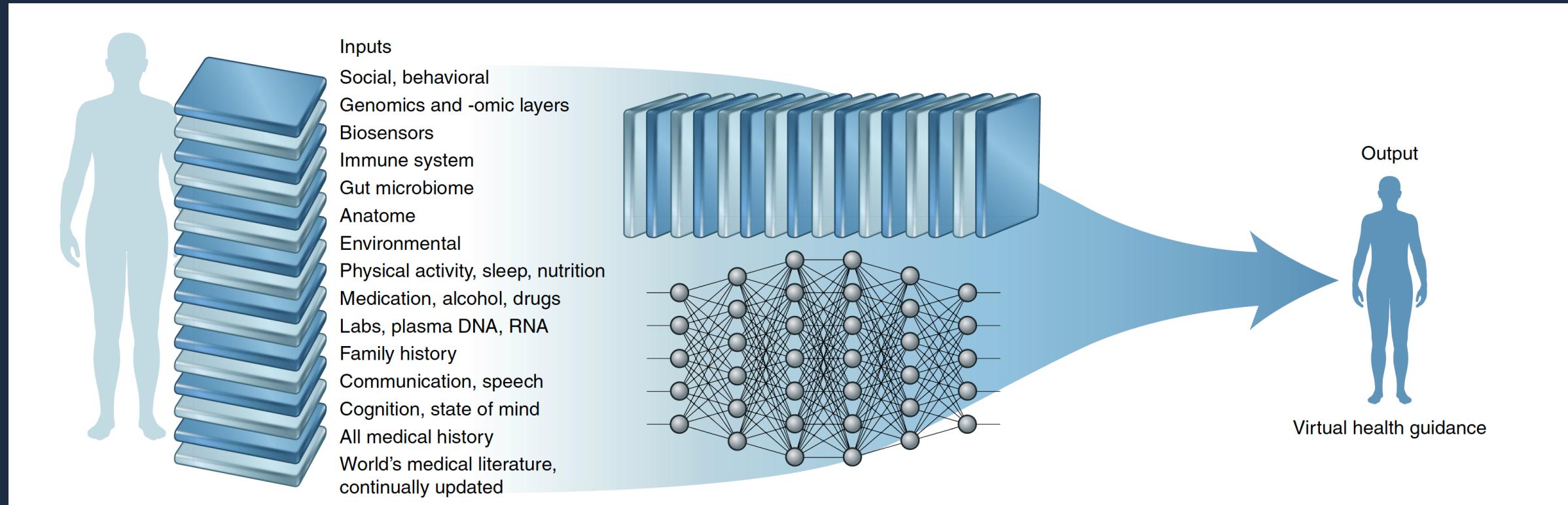


- 25 % har komplikationer til kirurgien
- 25 % tilbagefald indenfor 3 år

Forskellige patienter med den samme sygdom!



Big data på populations niveau og individ niveau



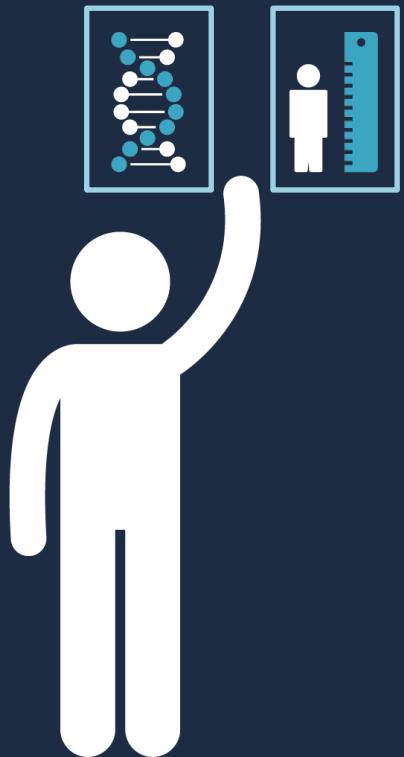
Løsningen – personlig medicinsk tilgang via anvendelse af AI prædiktionsmodeller?



Register data som “Big Data” kilde

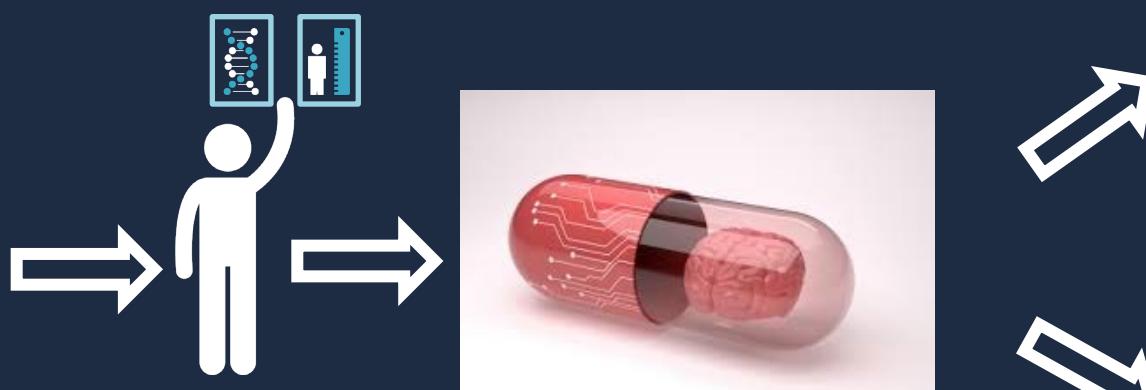


Viden omkring den *enkelte* ud fra *populationen* (personlig medicin)



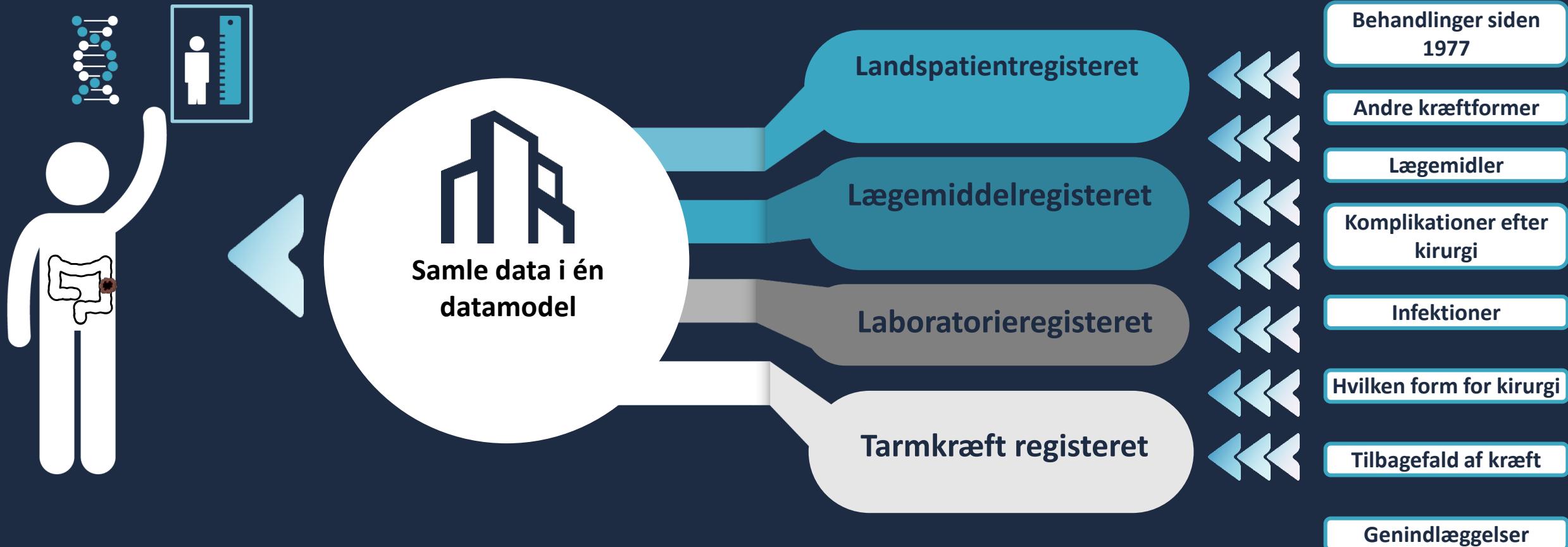


To nærliggende tilgange



AI baserede
prædiktions-
modeller

Patients like
me platform



Raw data

Multiple SAS/R Coding



North America



Southeast Asia



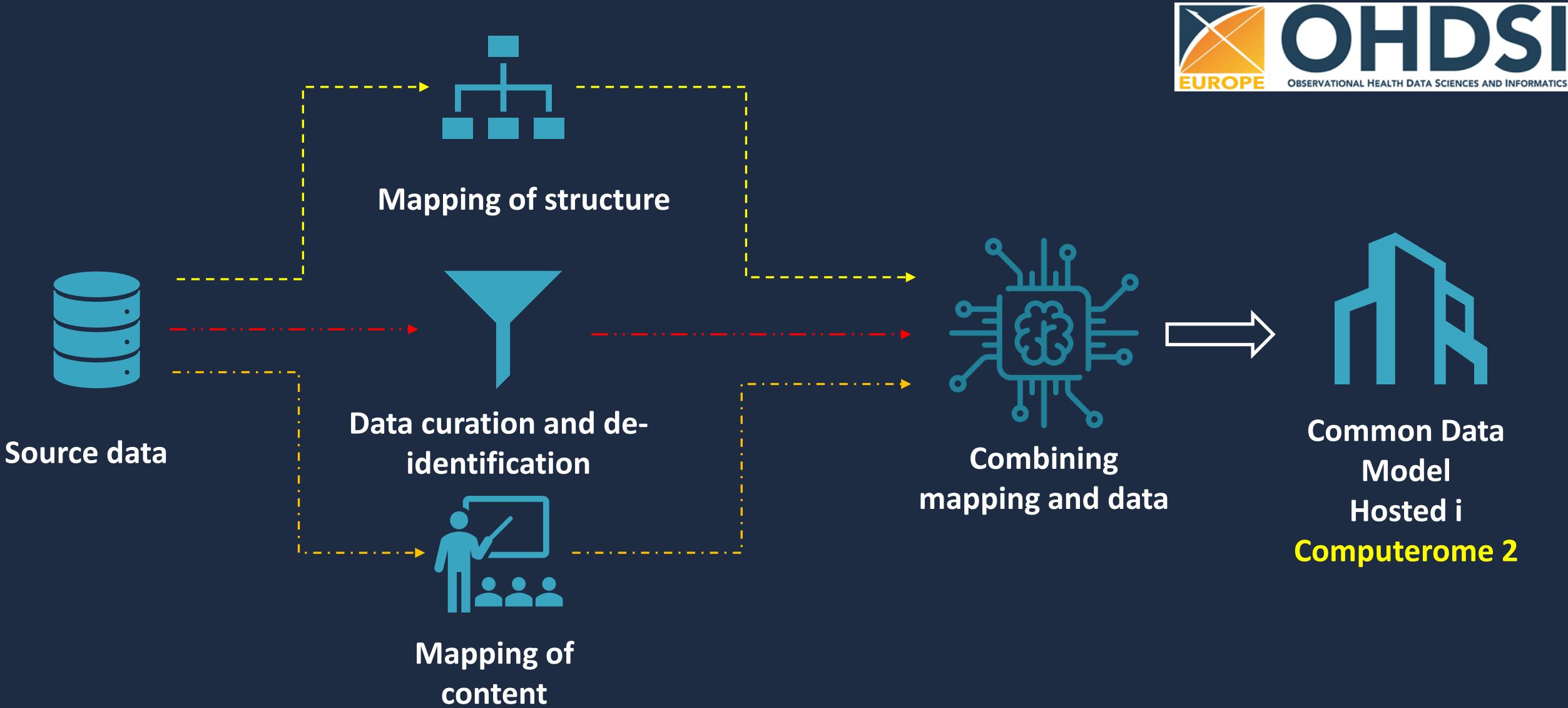
Europe

OMOPed data

Standardized Analytics



1. Skridt danne en ny fælles data platform



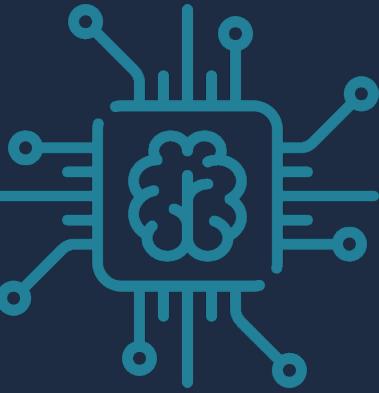
Anvende data fra den enkelte og fra populationen



Individual patient
data (Clinical)



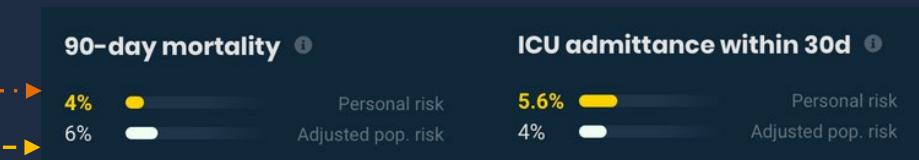
Population patient
data (Registries)



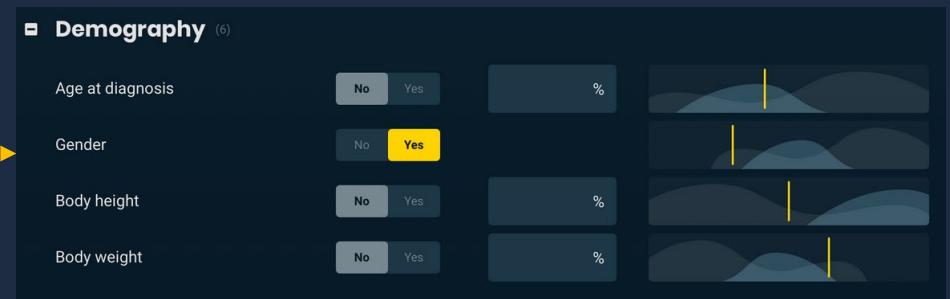
Bed side
application



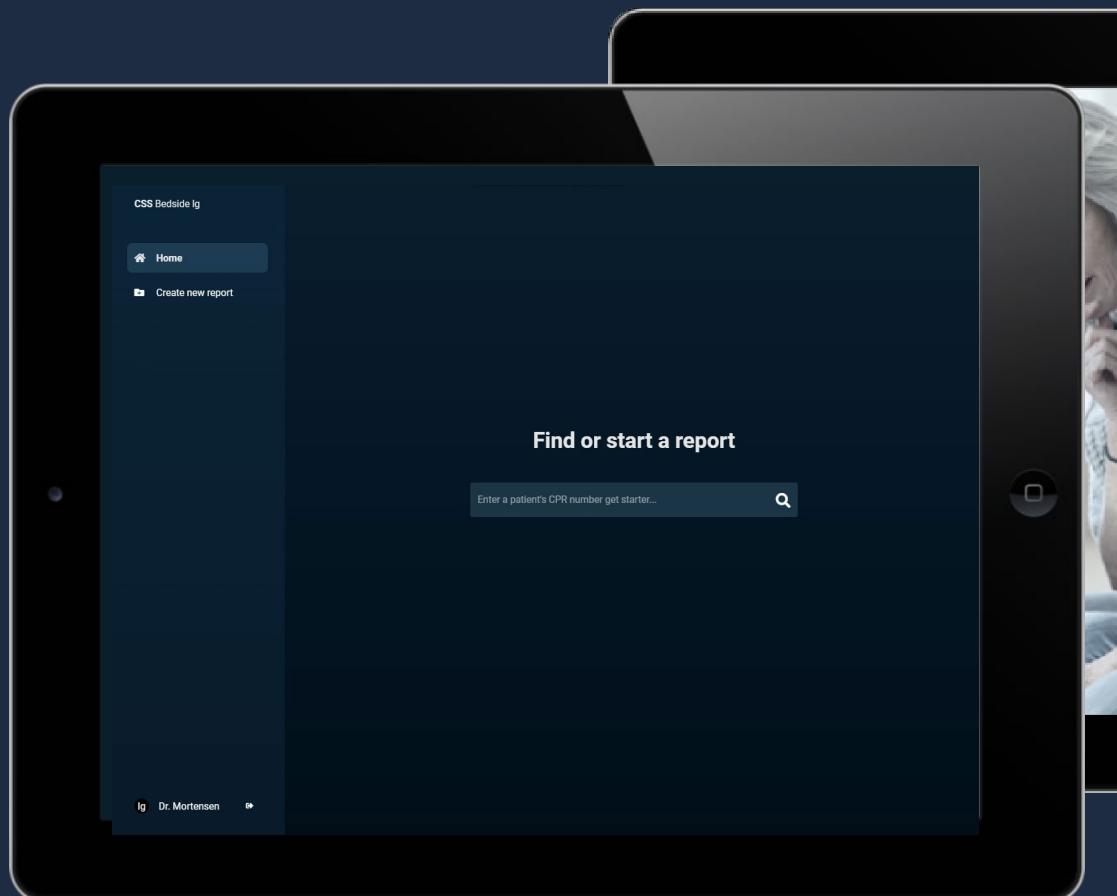
Standardized data presentation



Predicted risk + pop risk



Distribution of population data



Mads Mikkelsen

CPR: 221165-1234-1
Date: 16 December 2020

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Mads Mikkelsen

CPR: 221165-1234-1
Date: 16 December 2020

Overview

Suggestions
Adjusted population
Modifiable characteristics
Patient information

90-day mortality: Personal risk 4%, Adjusted pop. risk 6%
ICU admittance within 30d: Personal risk 5.6%, Adjusted pop. risk 4%

1-year mortality: Personal risk 10%, Adjusted pop. risk 8%
Compl., C-D grade ≥3B, 30d: Personal risk 8.5%, Adjusted pop. risk 6%

5-year mortality: Personal risk 50%, Adjusted pop. risk 45%
Recurrence: Personal risk 20%, Adjusted pop. risk 6%

Basic info

Sex	Male
Age	54
BMI	22,5
ASA	Class II
PS	2
Smoking	No
Alcohol consumption	Yes

Biochemistry

Hgb	[value]
Ferritin	[value]
TSAT	[value]
CEA	[value]

Radiology

Stage	N Stage
CRM threatened	Yes
Metastasis	Lung

Pathology

Histology	Yes
Material type	[value]
Histology of specimen	[value]

Current medication

Immunosuppressants	Yes
List of immunosuppressants	[value 1], [value 2], [value 3]

Surgical

Screening patient	No
Symptoms	[value 1], [value 2], [value 3]
Accute surgery	No

Oncology

Treatment	Neoadjuvant
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Important information

Plyp resection	[value]
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MDT decision

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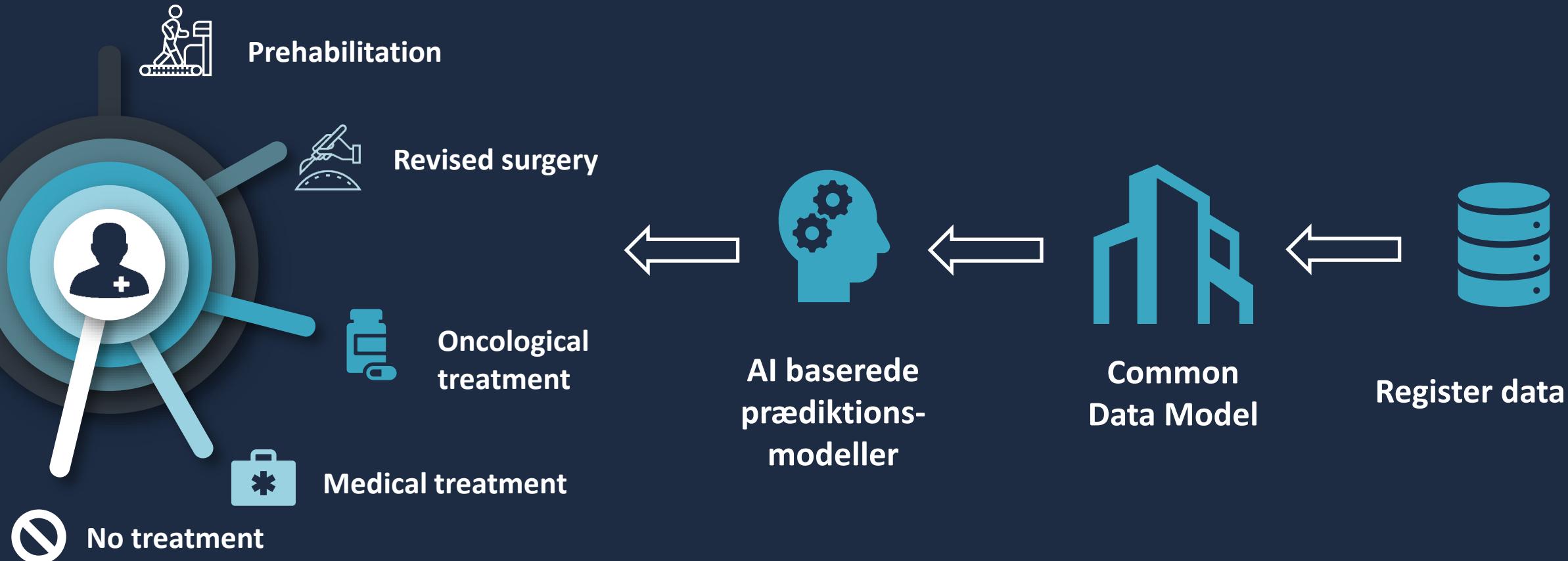
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Dr. Mortensen

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Impact-analyse

Hvordan vælger vi den rigtige
behandling til den rigtige patient
på det rigtige tidspunkt!





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