

Journeys for COVID-19 and Beyond; Current and Future Steps to Fully Realize this Vision

Session LB11

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LHS Case Study – UMN COVID-19

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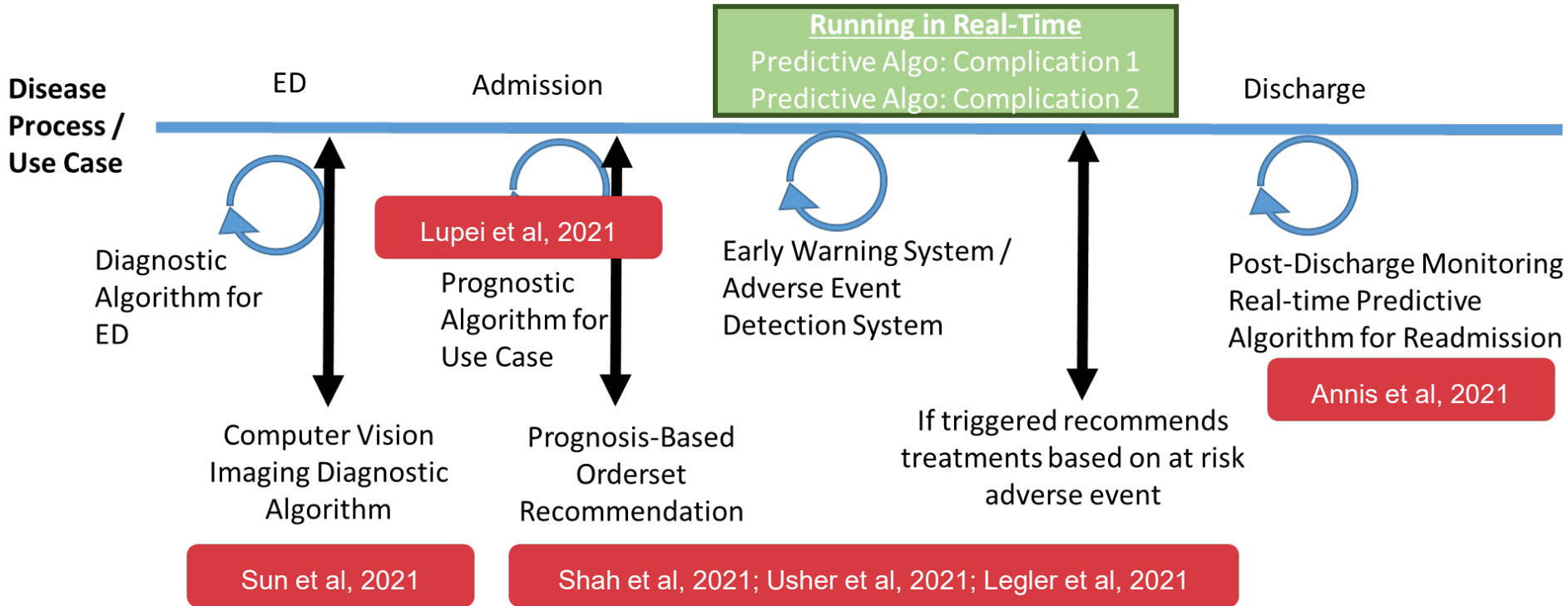
Scientific Director, Program for Clinical Artificial Intelligence, Center for LHS Science

Disclosure

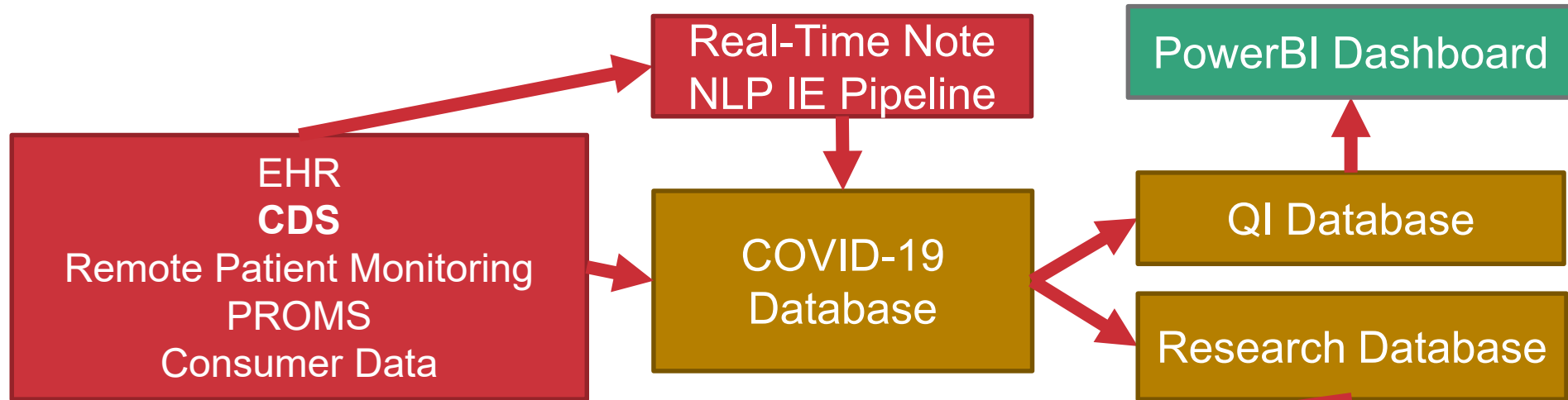


No conflicts of interest

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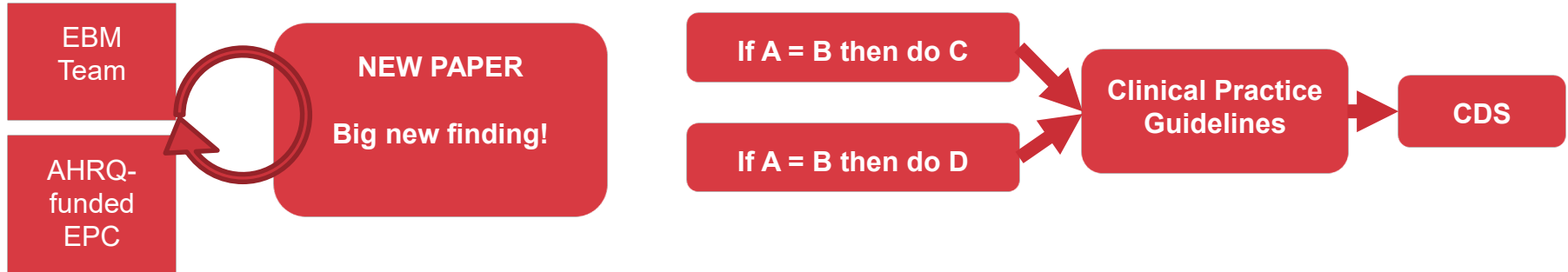
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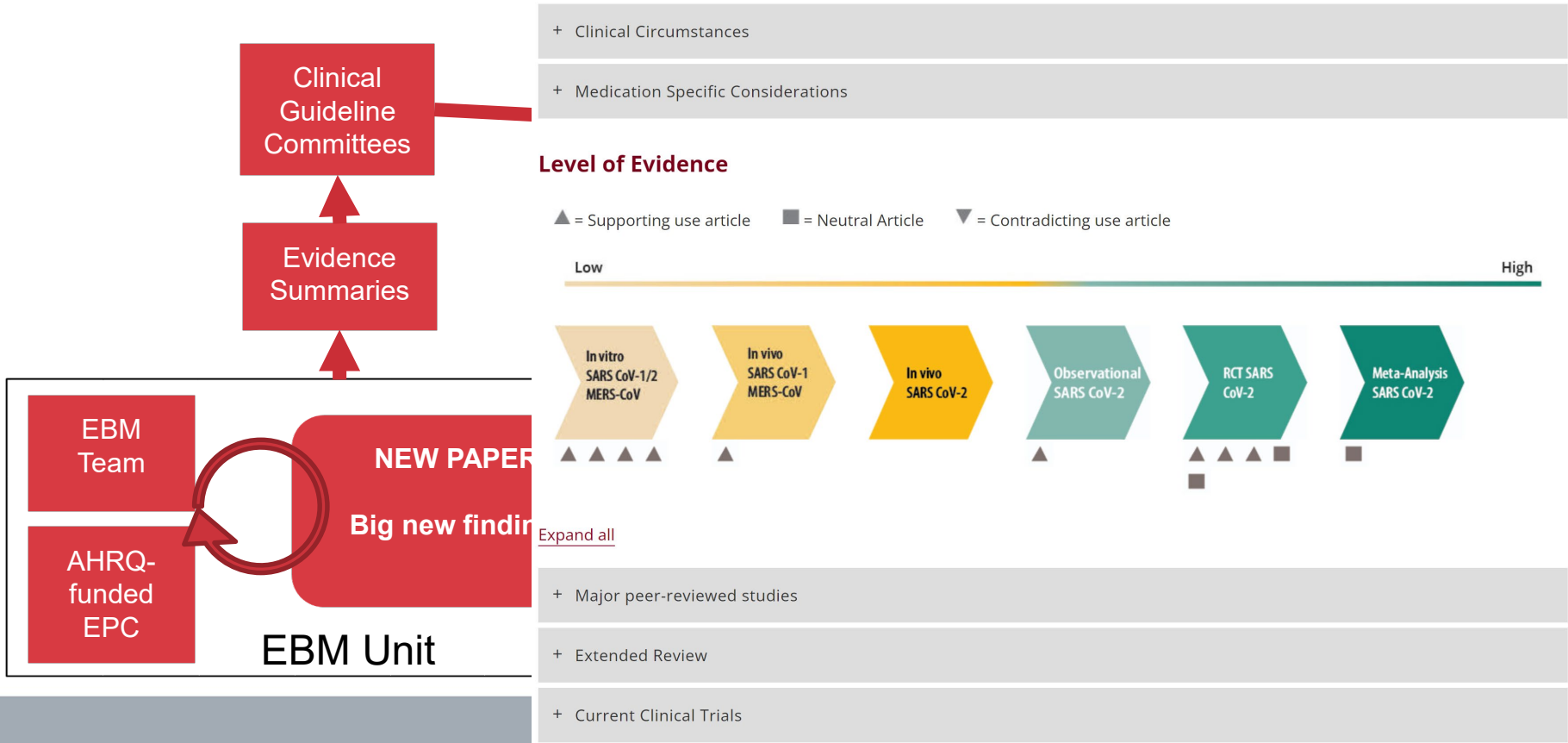
Hozayen et al, 2021; Bhavnani et al, 2021; Ibrahim et al 2021; Usher et al 2021; Tignanelli et al 2021; Ingraham et al 2021; Luszczek et al 2021; Dutta et al 2021; Bramante et al 2021; Bramante et al 2020; Sahoo et al 2021; Silverman et al 2021; Puskarich et al 2021; Karam et al 2021; Robbins et al 2020; Ingraham et al 2020; Ingraham et al 2020; Tignanelli et al 2020

18+ additional peer reviewed publications

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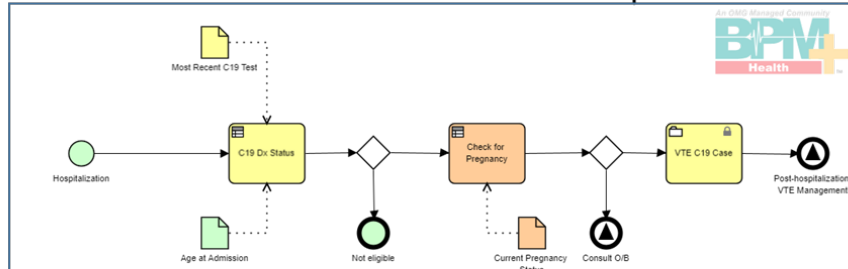
ACTS

How do we do this in an interoperable fashion on a larger scale across institutions?

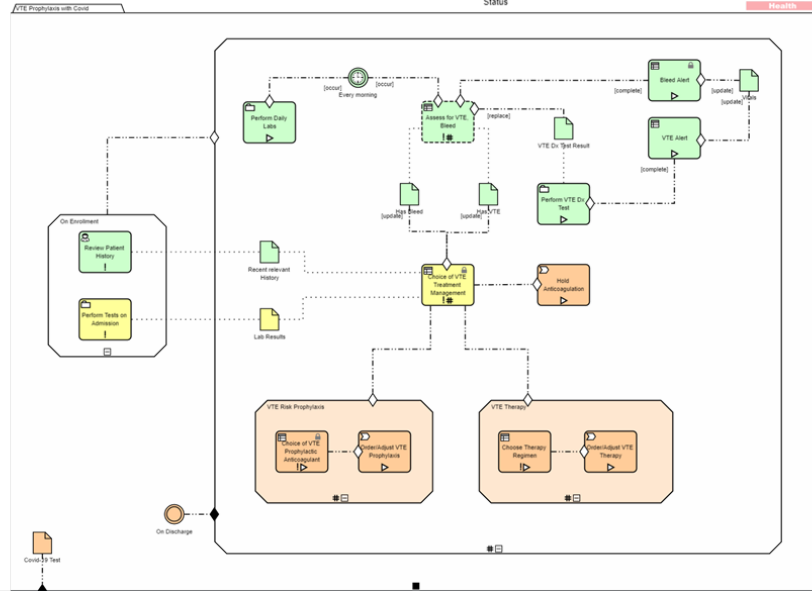
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COVID-19 VTE Prevention Guideline Representation

Guideline
Enrollment



Guideline and Monitoring



Native EHR CDS

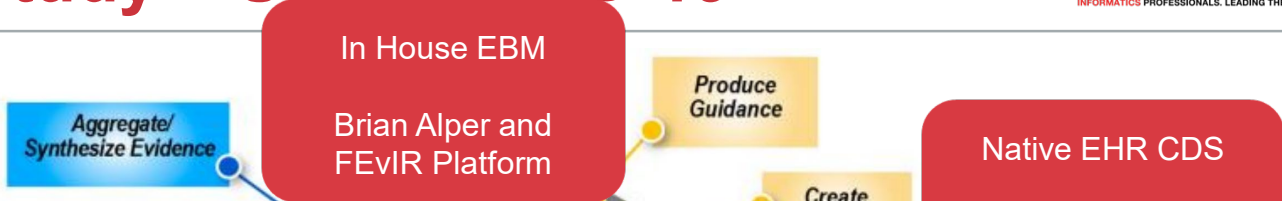
Translated to CPG-
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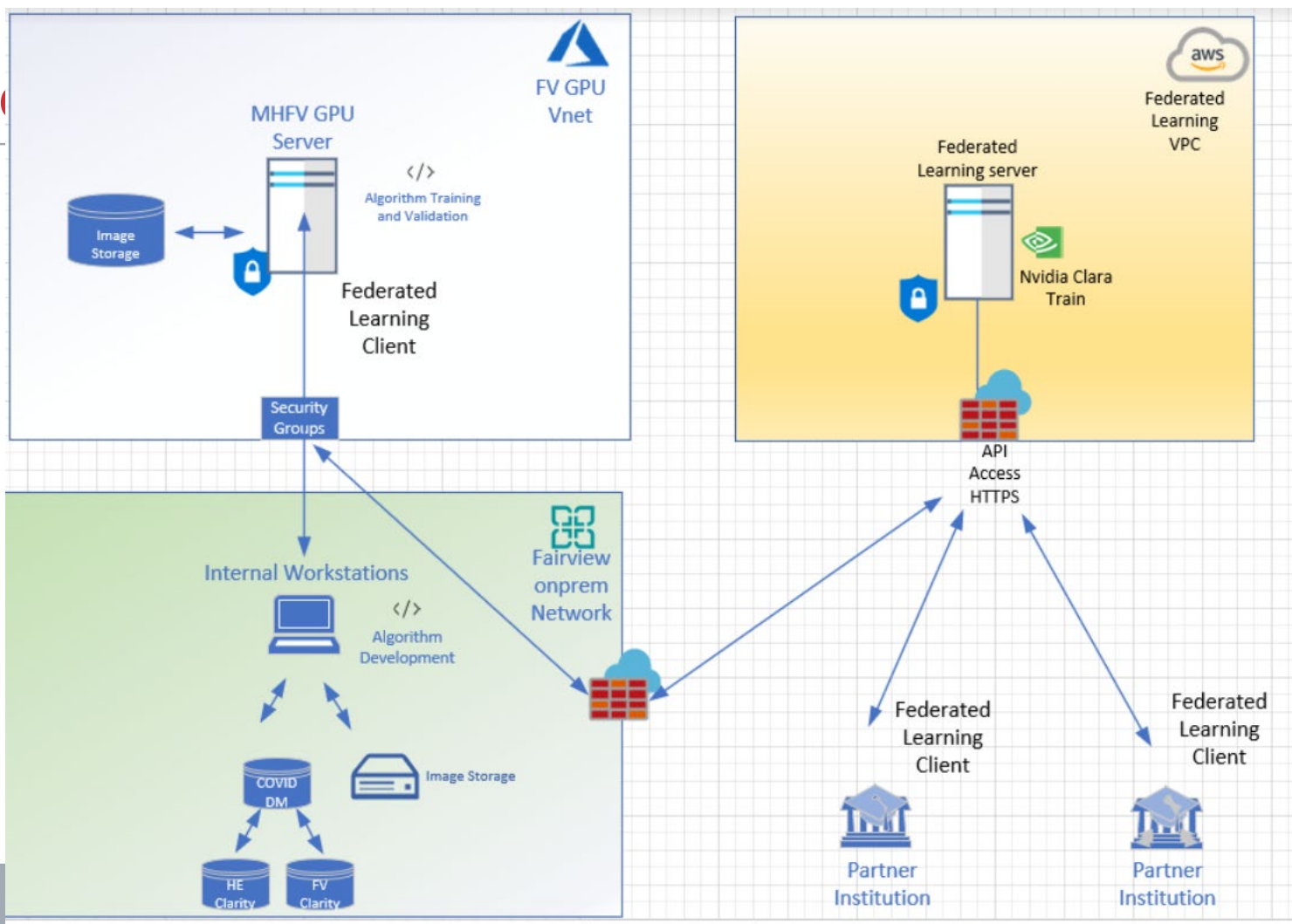


Computable Publishing: Recommendations Table Viewer

(Anticoagulation for COVID-19 - Recommendations Summary Browser Demo from ACTS COVID-19 Collaborative)

For COVID Patients In:	Critical Care	Hospitalized (not critical)
ASH Recommends:	Suggests using prophylactic-intensity anticoagulation Strength: conditional recommendation Last review date: 2021-04-07	Prophylactic-intensity over DOACs, LMWH, UFH, Fondaparinux, Argatroban, or Bivalirudin at intermediate-intensity or therapeutic-intensity Strength: weak Last review date: 2020-10-26
NIH Recommends:	Provide prophylactic dose anticoagulation Strength: AIII Last review date: 2021-02-11	Provide prophylactic dose anticoagulation Strength: AIII Last review date: 2021-02-11
WHO Recommends:	Anticoagulation at prophylactic intensity Strength: weak Last review date: 2021-01-25	Anticoagulation at prophylactic intensity Strength: weak Last review date: 2021-01-25
Australian Guidelines Recommends:	Use prophylactic doses of anticoagulants, preferably low molecular weight heparin (LMWH) Strength: Conditional recommendation Last review date: 2021-07-14	Do not routinely offer therapeutic anticoagulant dosing Strength: weak

LHS Case



Local Database
Federated Database and Model Training in Collaboration with Nvidia and support by CISCO



Federated Using NVI

White Paper

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Genevieve Melton-Meaux MD PhD



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Leadership Team
Staff

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Innovation Program
for Implementation &
Evaluation (HI-PIE)

*Define optimal
methods for studying
care*

Program for
Healthcare AI (P4AI)

*Gain new knowledge
around clinical AI in
care delivery*

Digital Technology
Innovation Program
(DTI)

*Discover methods to
design, deploy & sustain
innovative digital
solutions*

Value Analysis
Program

*Determine
opportunities for
more reliable care to
guide practice*

**Evidence Synthesis
Unit
RapidEval Unit**

Thank you!

