



Improving data for pathway redesign: coding across multiple organisations

30 June 2022 at 13:00

Speakers: Ruth Holland and Zo Tabrez



3M Health Information Systems

Data Intelligence Driving Precision Health Care

Zo Tabrez
Commercial and Operational Excellence Manager
3M Health Information Systems, EMEA

3M Health Information Systems

- 3M Clinician Solutions
- 3M Coding and Grouping
- 3M Population Health Management
- 109K+ patents → One of the world's top 10 companies owning healthcare/NLP-related patents and patent applications



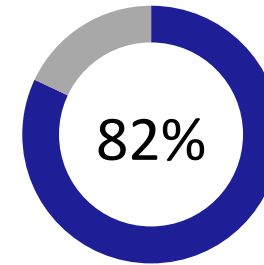
274 million
clinical documents processed in
one month alone in 2019!



20
countries
use 3M HIS products



300+
active industry partnerships



of US hospitals
use the
3M encoder
software



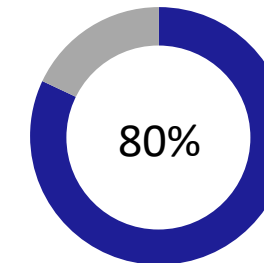
2,000+
facilities send data through our AI-
based NLP/NLU engine every day



41 states
use 3M methodologies as
their basis of payment



35+ years
in contract with CMS and other
government agencies



of UK NHS Trusts
use the
3M encoder
software

A history of innovation.

How do we easily and accurately categorise medical data?

Coding

How much should a procedure cost?

Reimbursement

How do we accurately capture everything?

Documentation

How do we meet productivity and accuracy demands?

Productivity

How do we improve outcomes and patient safety?

Quality

How can we continue to do more with less?

Performance

How can we improve systems of records and insight?

Risk Stratification

1978

1998

2011

2021

Industry increasingly placing premium on new competencies

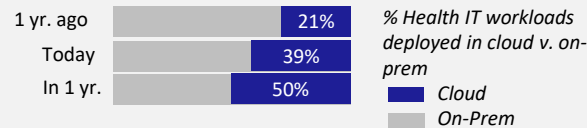
Healthcare system needs— cost reduction pressure, process inefficiency, care setting shifts, clinician burnout, drive tech trends

Cloud

3x

growth rate can be realized over peers by investing in cloud and articulating the strategy

Health systems and providers increasingly desire shift to cloud²



Conversational AI

23%

premium paid by Microsoft for Nuance in the \$16B acquisition of the Conversational AI player

“We are excited about DAX to accurately capture what’s happening in the visit, especially with the doctor being able to look the patient in the eye instead of the computer”
– CMIO, health system⁸

Connectivity

10x

multiple for Innovaccer, a data & connectivity platform, with its recent funding, putting its valuation at \$1.3B⁴

“ We have achieved EHR implementation in this country, but we have not yet achieved the value proposition: connectivity and information exchange and transformation of care”
– Health Exec, Provider⁸

Longitudinal Data

91%

of leaders ensure data quality and continue to enrich their data compared to 61% of laggards⁵

“A lot of physicians trained in the 1980s and 1990s and we are giving them dashboard overload ...they need real time alerts”
– VP of Clinical Systems at health system⁸

Automation/Machine Learning

\$225M

raised by AI Startup Olive, enabling an acquisition of Verata health to address prior authorizations⁶

“If I could wave a magic wand, it would be to automate, automate, automate. If we can reduce the impact of regulatory on clinicians, that’s big”
– RCM Lead, large health system interview⁸

End-to-end

15%

CAGR of R1, an end-to-end RCM player, driven by acquisitions in front and back RCM, and expansion of labor and tech-based capabilities

“From an organizational perspective, we have a goal to reduce the number of applications we support. We have one person managing 3M 360’s product and another managing Nuance.”
–CMIO, Health system⁸

1. Accenture The Cloud First CEO 2. [HIMSS Cloud Computing forum](#) 3. Nuance financial data 4. [vcircle](#) 5. [Accenture](#) 6. Olive 7. R1 JPM Materials 2021 8. Accenture Voice of Market interview insights (based on 27 interviews)

3M HIS: The Mission

Create
Time to Care

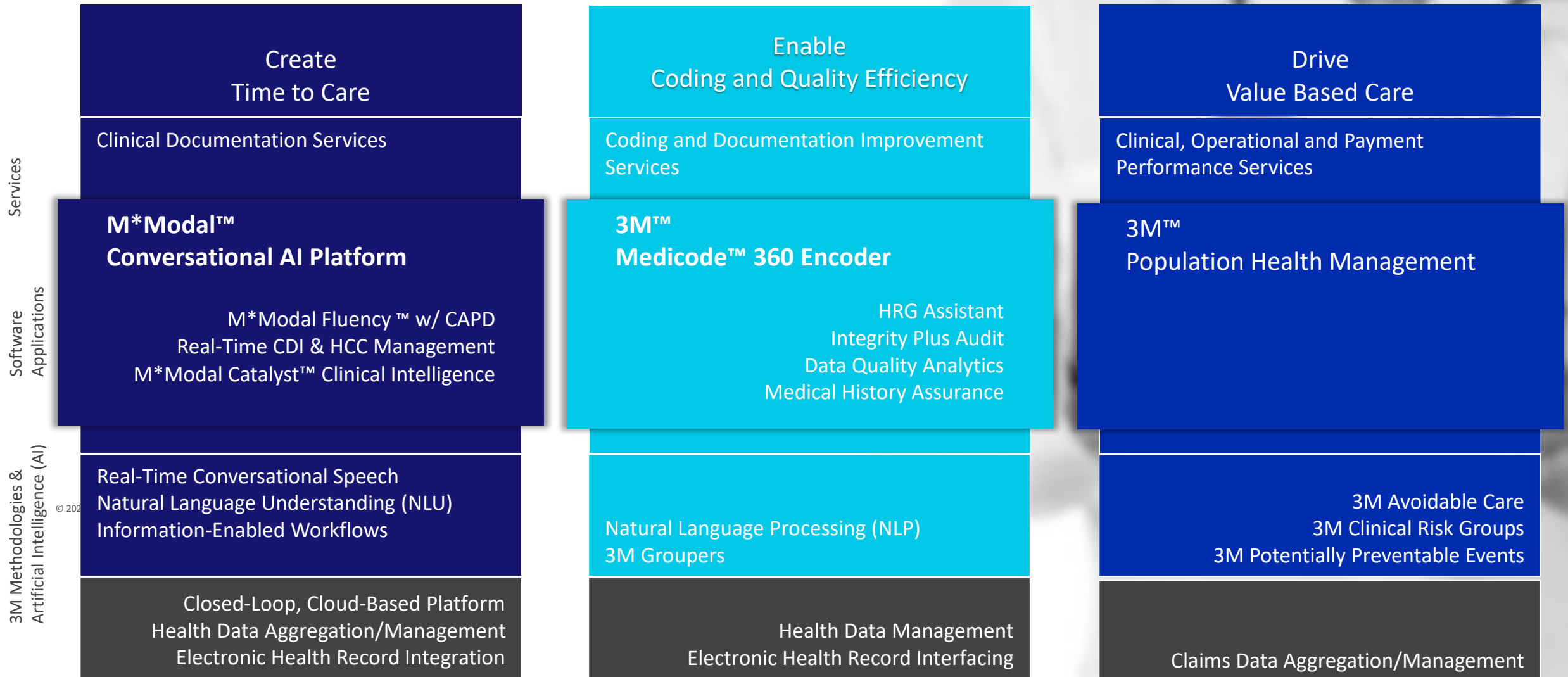
Enable Coding and Quality Efficiency

Drive
Value Based Care

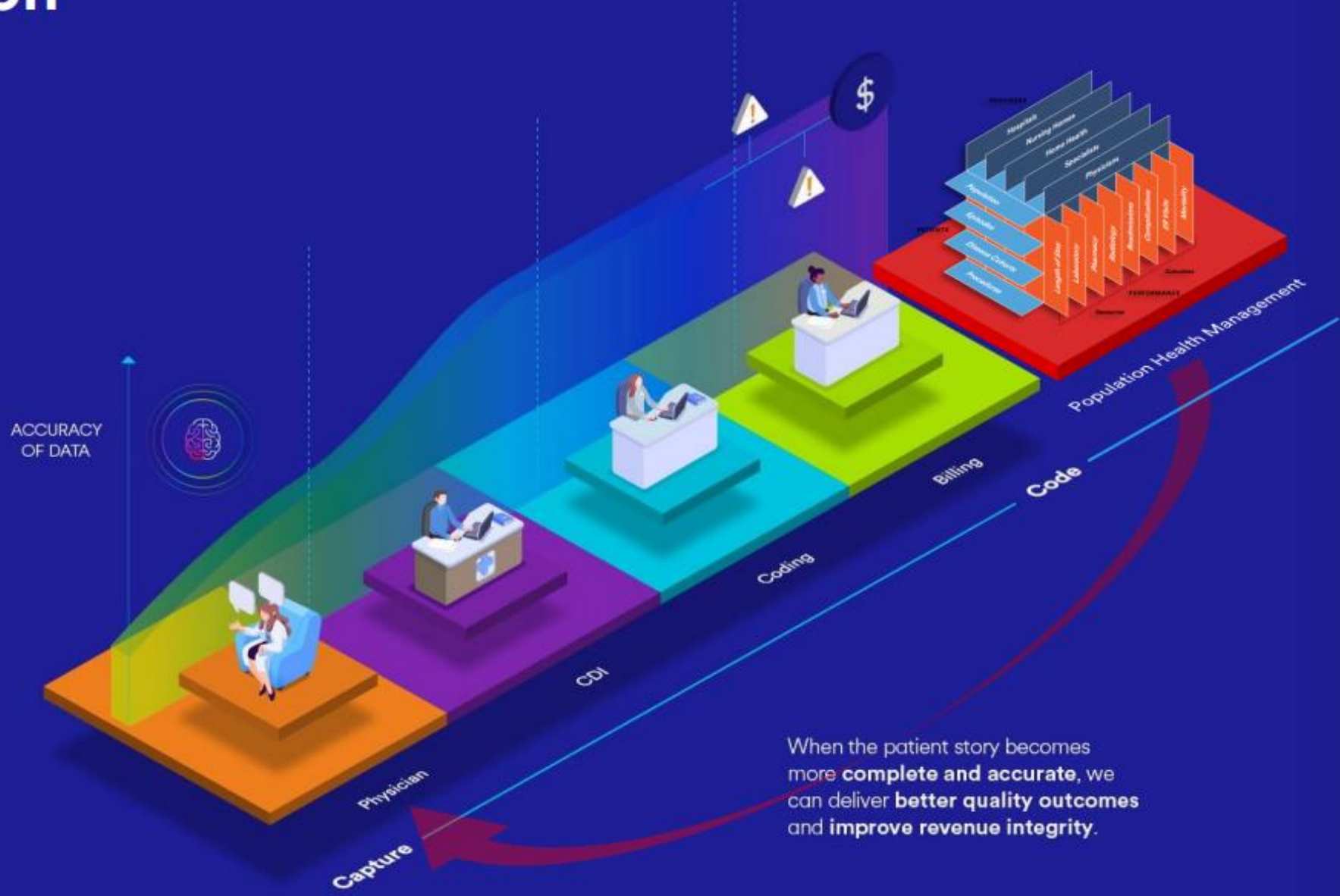
3M HIS is **transforming the experience of healthcare** by **closing the loop between clinical care and data quality** with clinical intelligence through (AI)



Strategic Platform of 3M HIS



3M HIS Vision



Coding across multiple organisations

30 June 2022

Ruth Holland, Deputy CIO
Imperial College Healthcare NHS Trust

The population of NW London ICS:

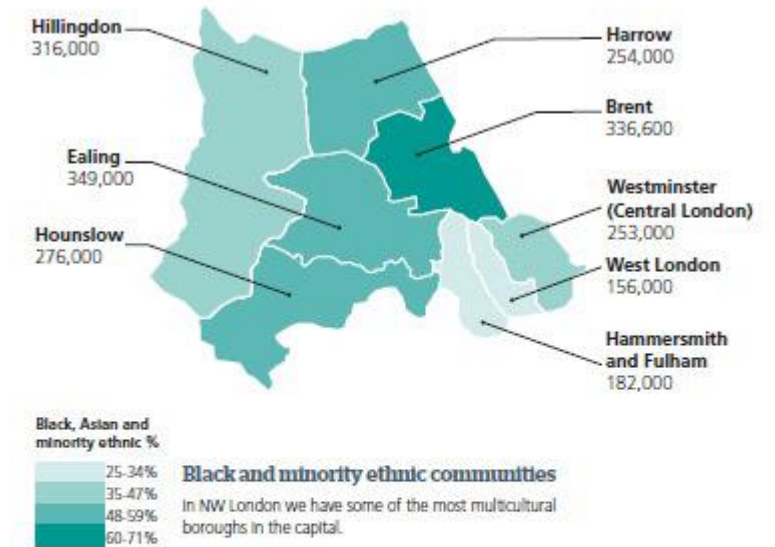
NW London is home to over 2.4 million people living in the eight boroughs

Very diverse in terms of ethnicity and deprivation

In Brent 66% of residents are from Black, Asian and other Minority Ethnic (BAME) communities, 37.2% of the population do not have English as a first language

Often areas in the least deprived quintiles are adjacent to those in the most deprived. Our geographical areas of greatest deprivation are particularly concentrated within Brent, Ealing and North Kensington.

The NW London footprint population numbers



NW London has:

- over 2.4million people
- an annual health spend of over £3bn
- 8 boroughs
- 360 GP practices
- 10 acute specialist hospitals
- 2 community and mental health service providers
- 2 community health service providers
- A range of voluntary sector organisations

Borough populations

Each of our boroughs supports a different population size, with Brent, Ealing and Hillingdon having populations that are double the size of some of our central London boroughs.

NW London ICS providers

Complex due to its size - includes **eight** London boroughs and a wide range of provider organisations

350 GP practices organised into **45** PCNs

Four community and mental health Trusts (Central London Community Healthcare Trust (CLCH), Central and North West London Trust (CNW London), Hounslow and Richmond Community Trust (H&RCH), West London Trust (WLT)
One London Ambulance Service

Two specialist providers (Royal Marsden and the Brompton and Harefield), while structurally part of other ICS, deliver critical services to our population

A number of independent providers e.g. LCW & Care UK (111), Greenbrook (UTCs) and wide range of Volunteer and Community organisations

Four acute Trusts (Chelsea & Westminster Trust (ChelWest), The Hillingdon Hospital Trust (THHT), Imperial College Healthcare Trust (ICHT), London North West Healthcare Trust (LNUHT))

276 care homes (including hospices and other specialist providers)

NW London Acute Provider Collaborative

NWL ICS is **Complex** due to its size - includes **eight** London boroughs and a wide range of provider organisations

Four acute Trusts (Chelsea & Westminster Trust (ChelWest), The Hillingdon Hospital Trust (THHT), Imperial College Healthcare Trust (ICHT), London North West Healthcare Trust (LNUWUT))

Responsible for **twelve** hospitals

Relationships between all partners in the ICS significantly developed throughout the pandemic

Matthew Swindells started as joint Chair on 1 April 2022.

NW London Acute Provider Collaborative:

Acute trusts in NWL are on a journey to share a single electronic patient record by 2023

Currently very different levels of digital maturity:

- Imperial and Chelwest are HIMSS level 5 and paperless
- LNWH and THH still largely using paper records

Pathways are being redesigned - proposed Elective Orthopaedic Centre at Central Middlesex

Must be underpinned by consistent data standards and good quality data



NWL Acute Collaborative Clinical Coding leads:

Established group in August 2020

To standardise clinical coding policies, processes and systems across acute providers in NWL

To use benchmarking to drive improvement in clinical coding services

To share knowledge of service developments in NWL that may impact on clinical coding



Journey so far – focus on clinical coding standardisation

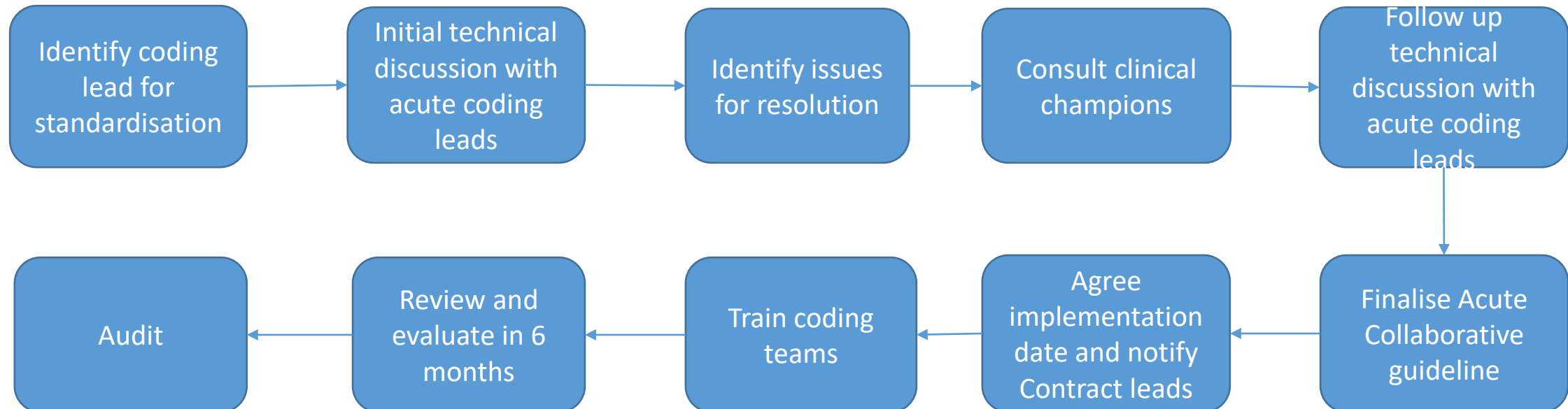
Initial priority - standardising coding of Covid patients

Then identified top 10 procedures and services by activity volume that were common across all 4 organisations

- Endoscopy standardised coding went live 1/10/21
- Gynaecology standardised coding went live 1/12/21
- Orthopaedics lower limb standardised coding went live on 1/5/22
- Pipeline :
 - Urology to go live on 1/8/22
 - ENT
 - Orthopaedics upper limb
 - Obstetrics

Fully supported by CFOs – both Acutes and ICS

Approach to Standardisation of coding:



Agreed principles:

- Where coding differs between acute trusts, the approach of the majority would be adopted in the Acute Collaborative guideline.
- Refer to national coding query resolution desk as an exception

Future developments:

- Standardisation of coding of every speciality/sub-speciality could potentially take 5 years
- May change order of prioritisation to support delegation of some specialist commissioning responsibility from NHSE to ICSs from 2023.
- Digital accessibility of guidelines - via encoder and audit system for streamlined workflows
- Digital 'library' of all NWL coding guidelines accessible by all coding teams
- Single NWL coding team is a potential outcome following implementation of single EPR

- Inclusive leadership style
- Collaboration and a shared strategic vision of digital and data convergence is key
- Ensure CFOs fully supportive
- Start with a non-complex area that is common across all providers
- Important to get input from clinical champion(s)
- Ensure Contract leads are notified to pre-empt any issues with 'counting and coding' changes
- Agree a standard format for guidelines that is user friendly for coders to use
- Identify a 'librarian' for the guidelines
- Clinical pathways evolve – revisit guidelines periodically



Thank you

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