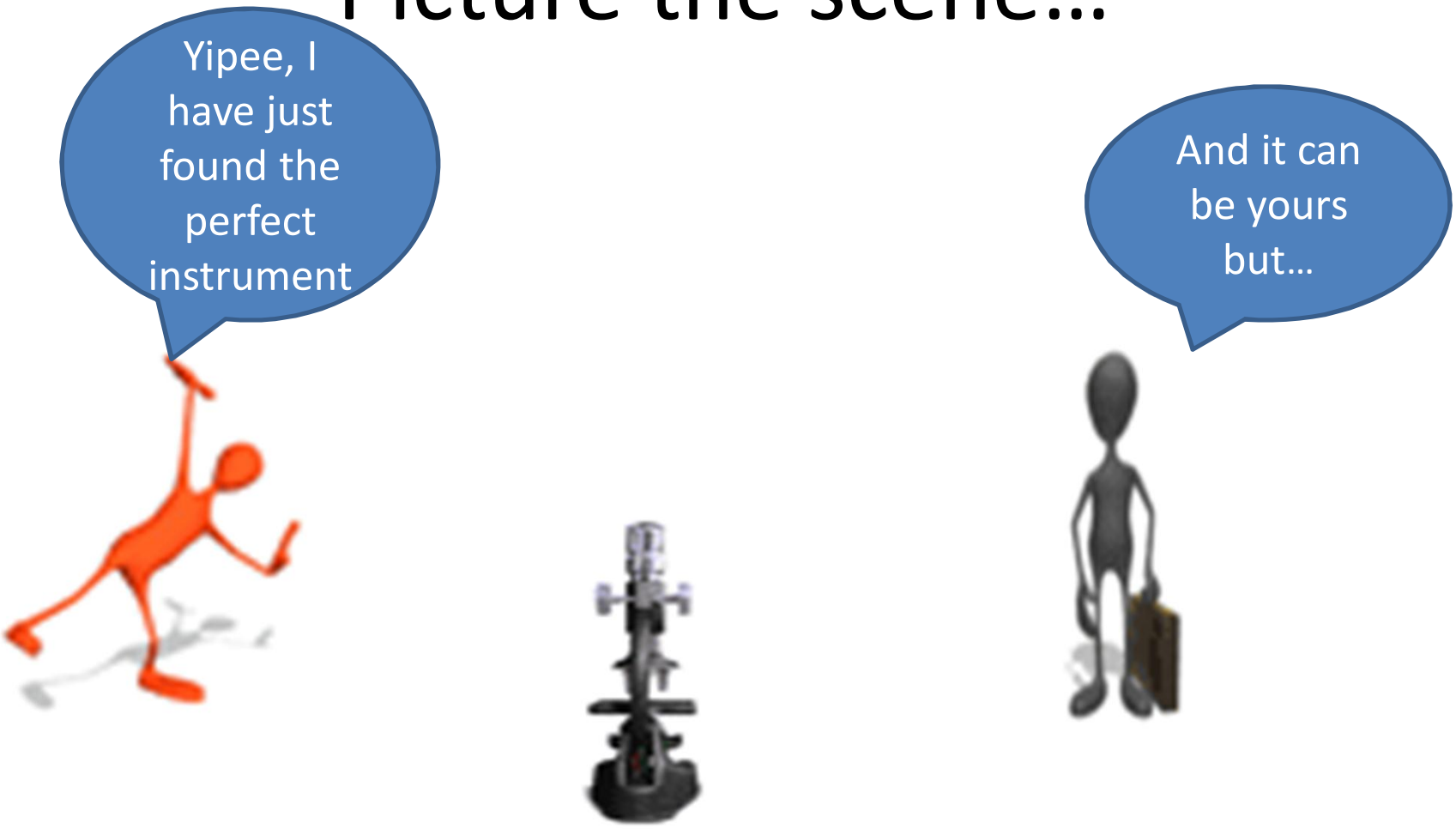
Making Friends with the Enemy

Linda Lodge

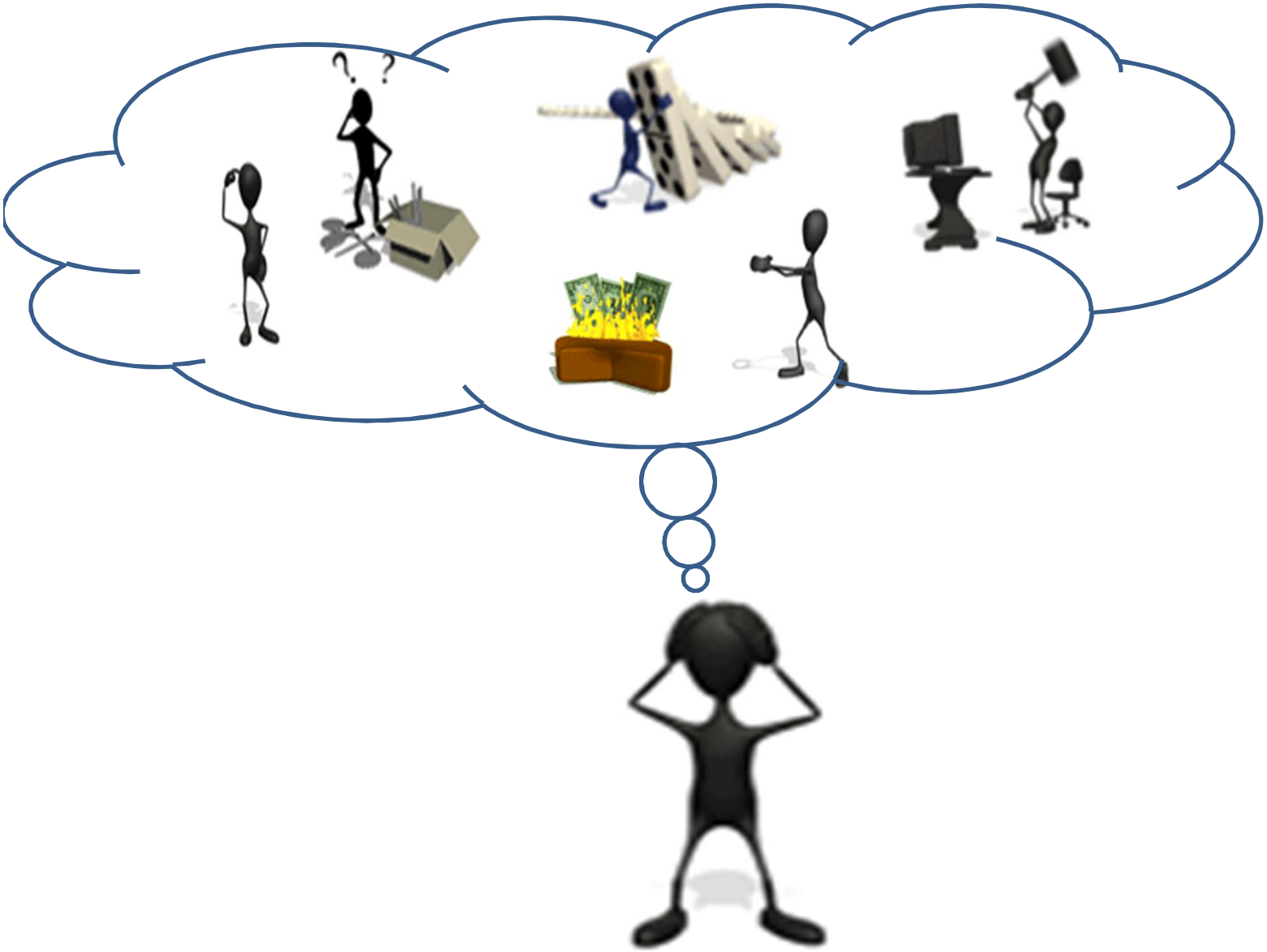
WPIT Interface Taskforce Chair

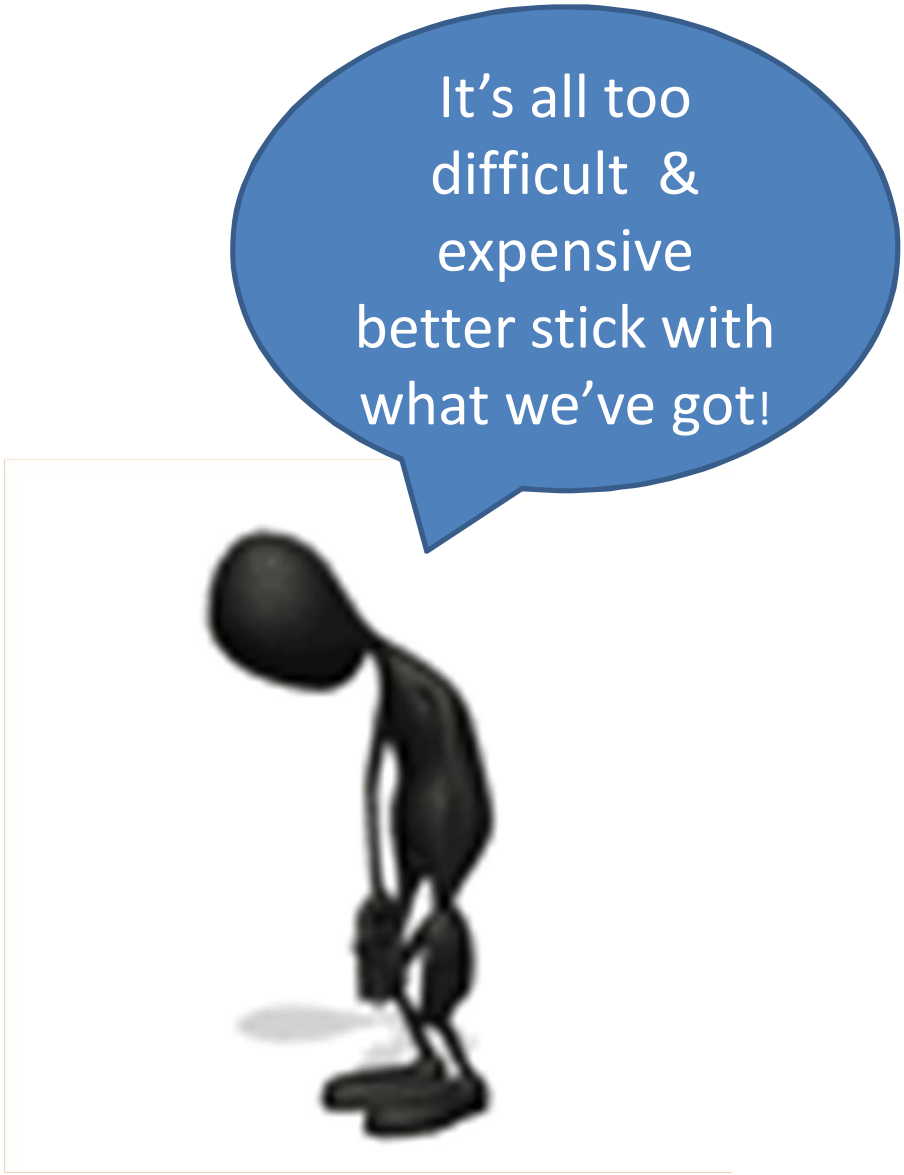
Picture the scene…



Your wish come true in the latest technology available for an attractive price

You need a new interface to your LIMS




It’s all too difficult & expensive better stick with what we’ve got!

Despair no more your new friend

The ISBT Instrument Interface Standard (I2B) has arrived!

WPIT Interface Taskforce Steering Group

- Linda Lodge
- Rik Hulleman
- Shankar Goudar
- Paul Ashford
- Lone Espensen
- Kevin Forbes
- Teresa Risopatron Knutsen
- Renny Skagestad

A Standard Interface Specification for data transfer from Instruments to Blood Establishment Computer Systems (I2B)

Why?

Reduce complexity, cost & effort of interfacing

Provide clear & consistent guidance to suppliers

Increase donor & patient safety

Resource available for more value add activity

Increased ability to exploit new developments

Realise the value of data

Requirements

Functional Interoperability

Send & Receive Data

Messaging Standard

How information is packaged

Semantic Interoperability

Common Language, Common vocabulary

Standard within the standard

What information is packaged

What does it look like

Objectives

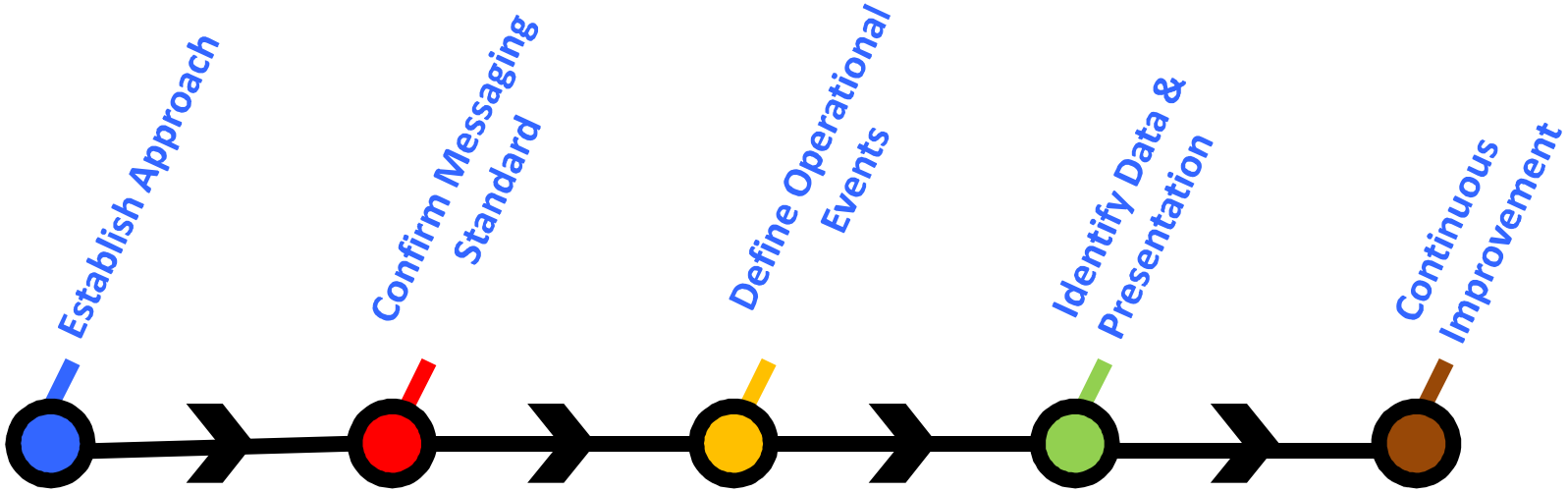
Work within existing standards

Common minimum data sets

Common data definitions

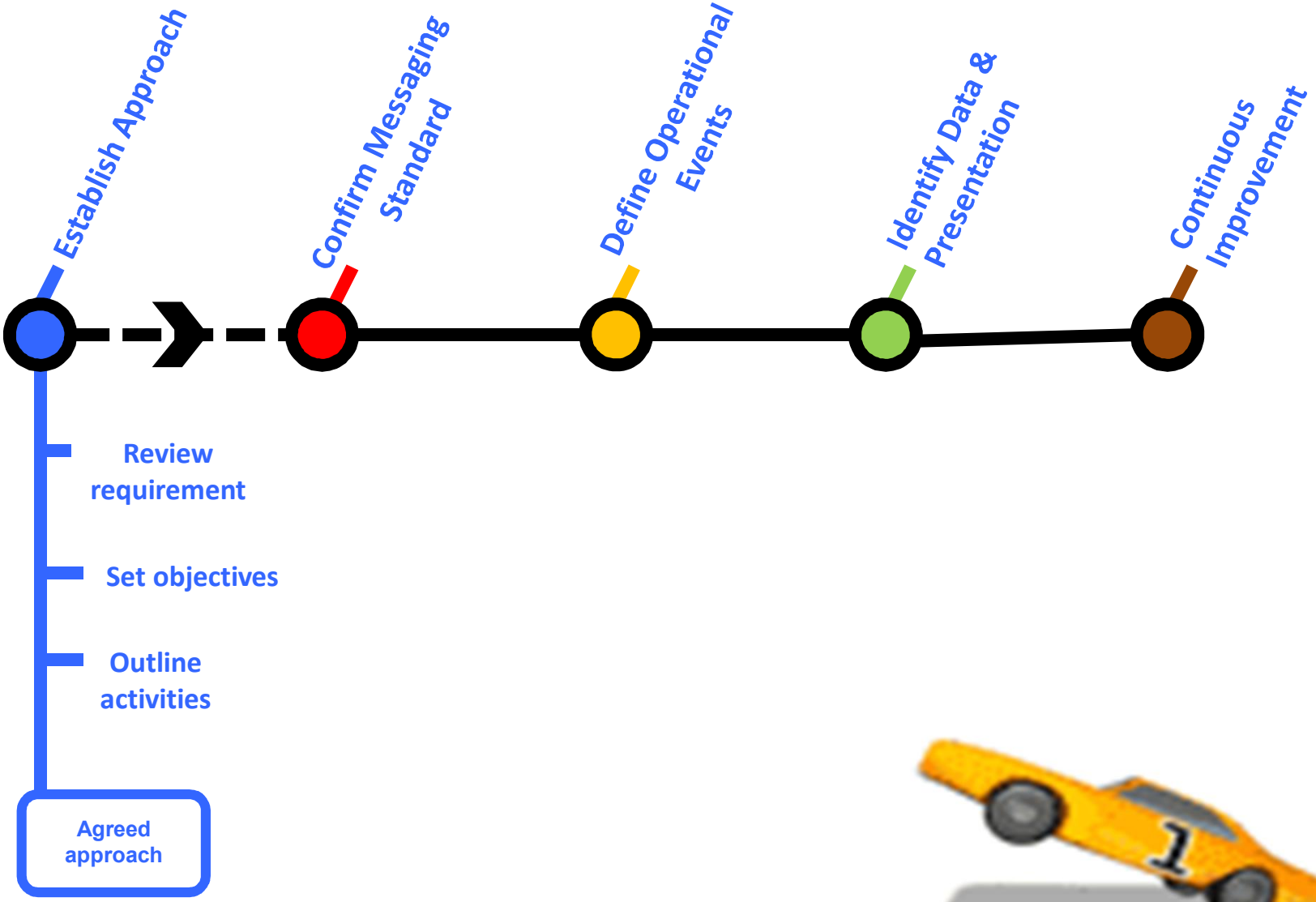
Common presentation of data

The route


Establish Approach
Confirm Messaging Standard
Define Operational Events
Identify Data & Presentation
Continuous Improvement

The I2B Interface Journey…

…was not smooth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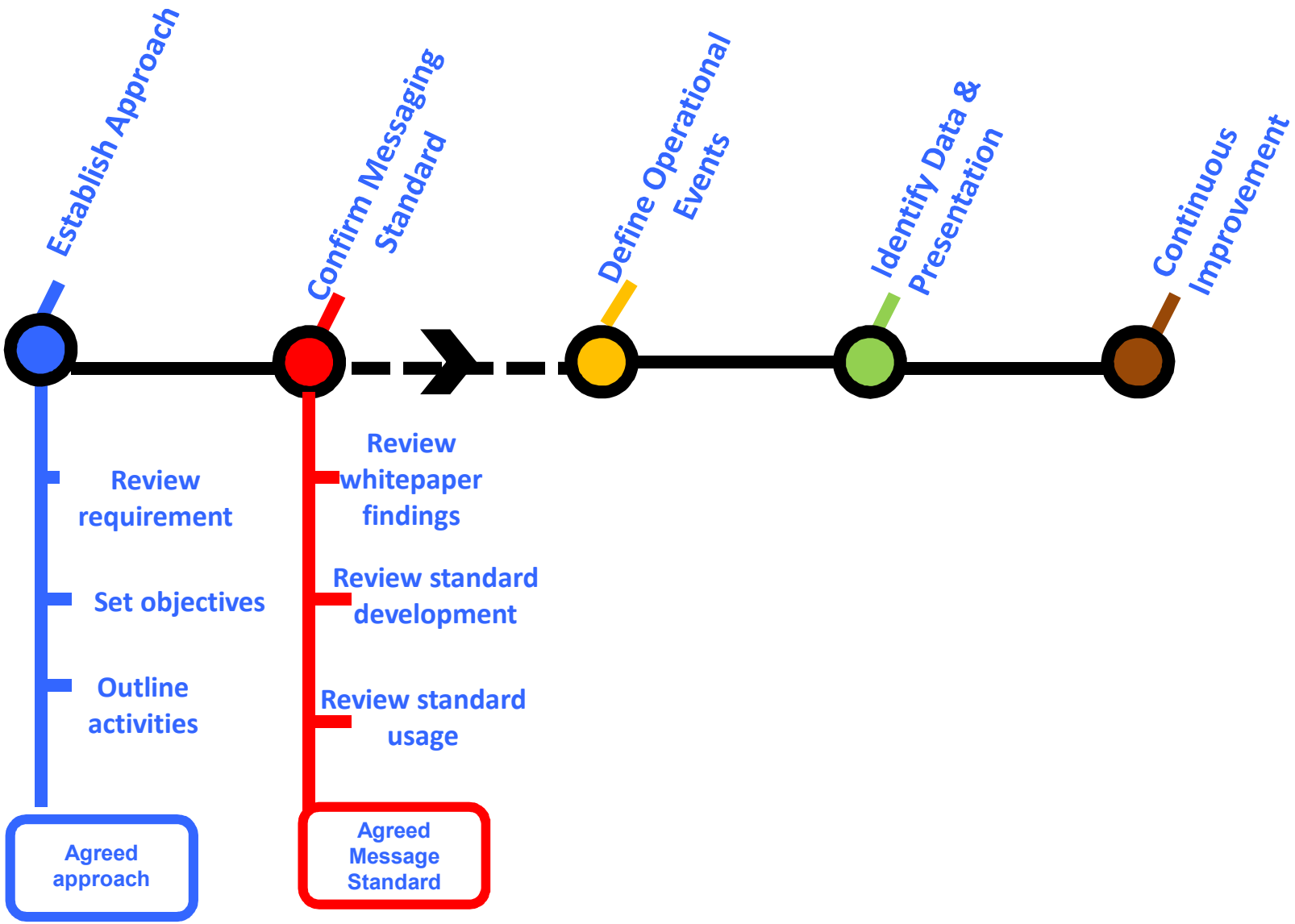
Agreed approach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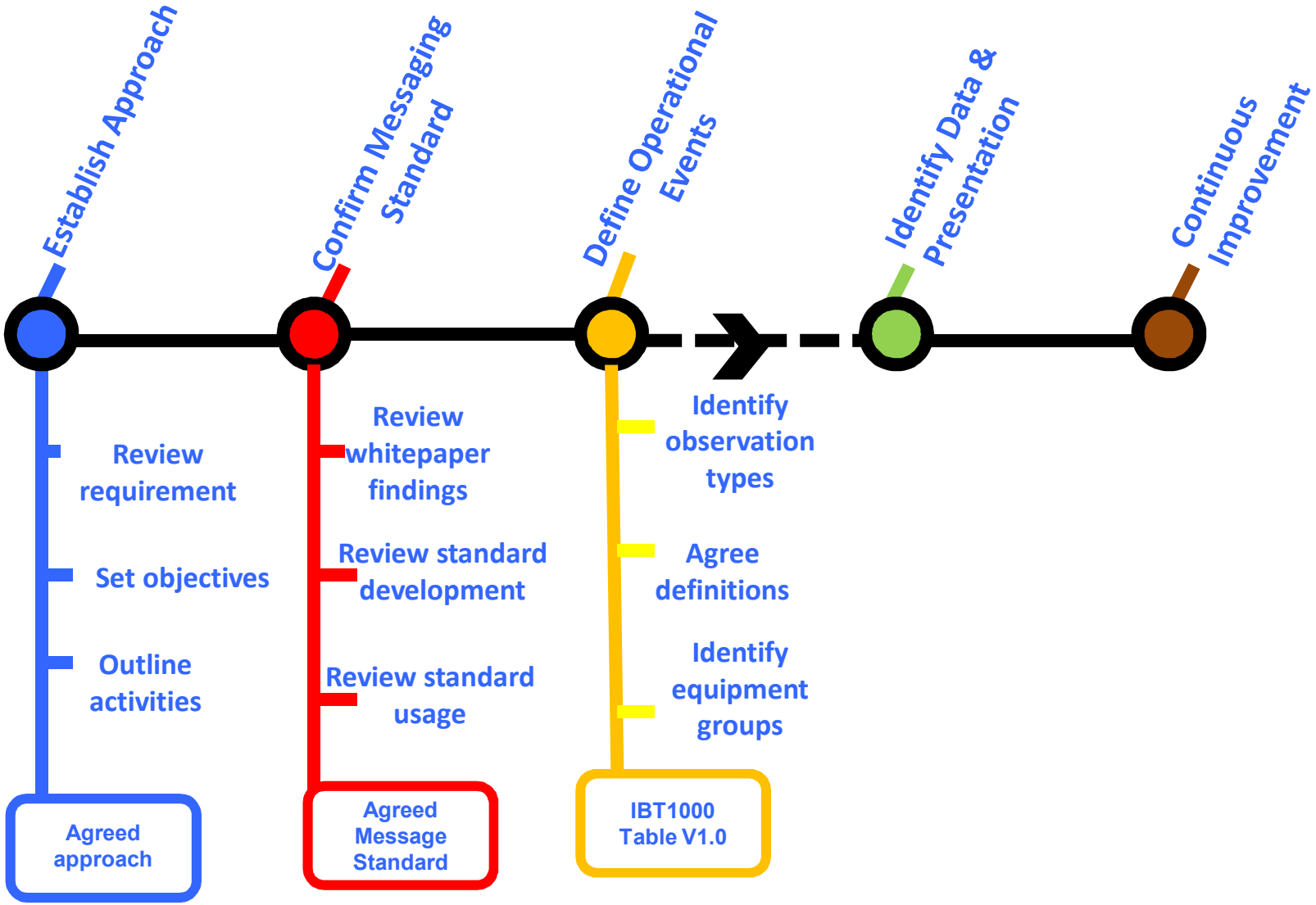
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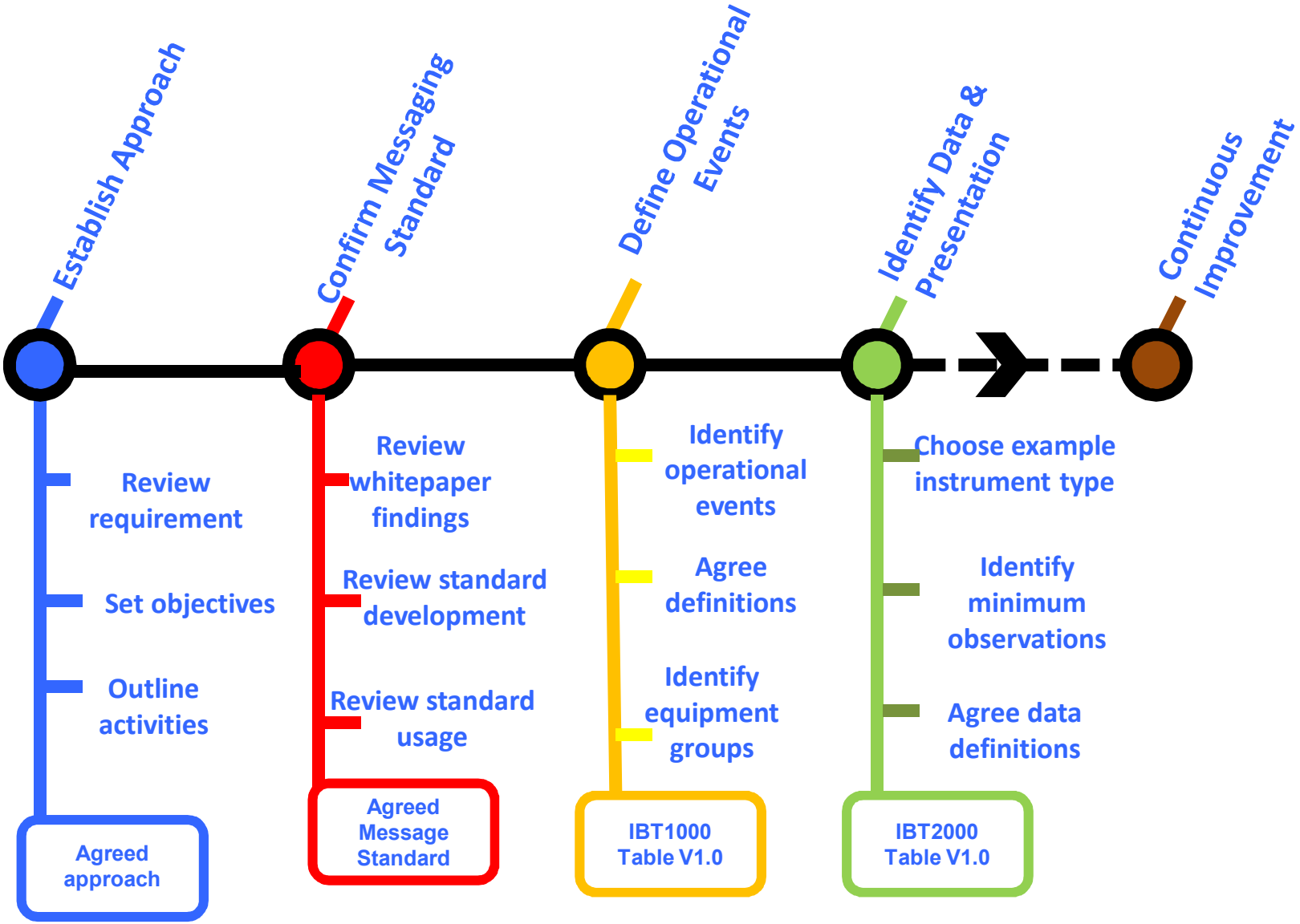
Agree definitions
Identify equipment groups
IBT1000 Table V1.0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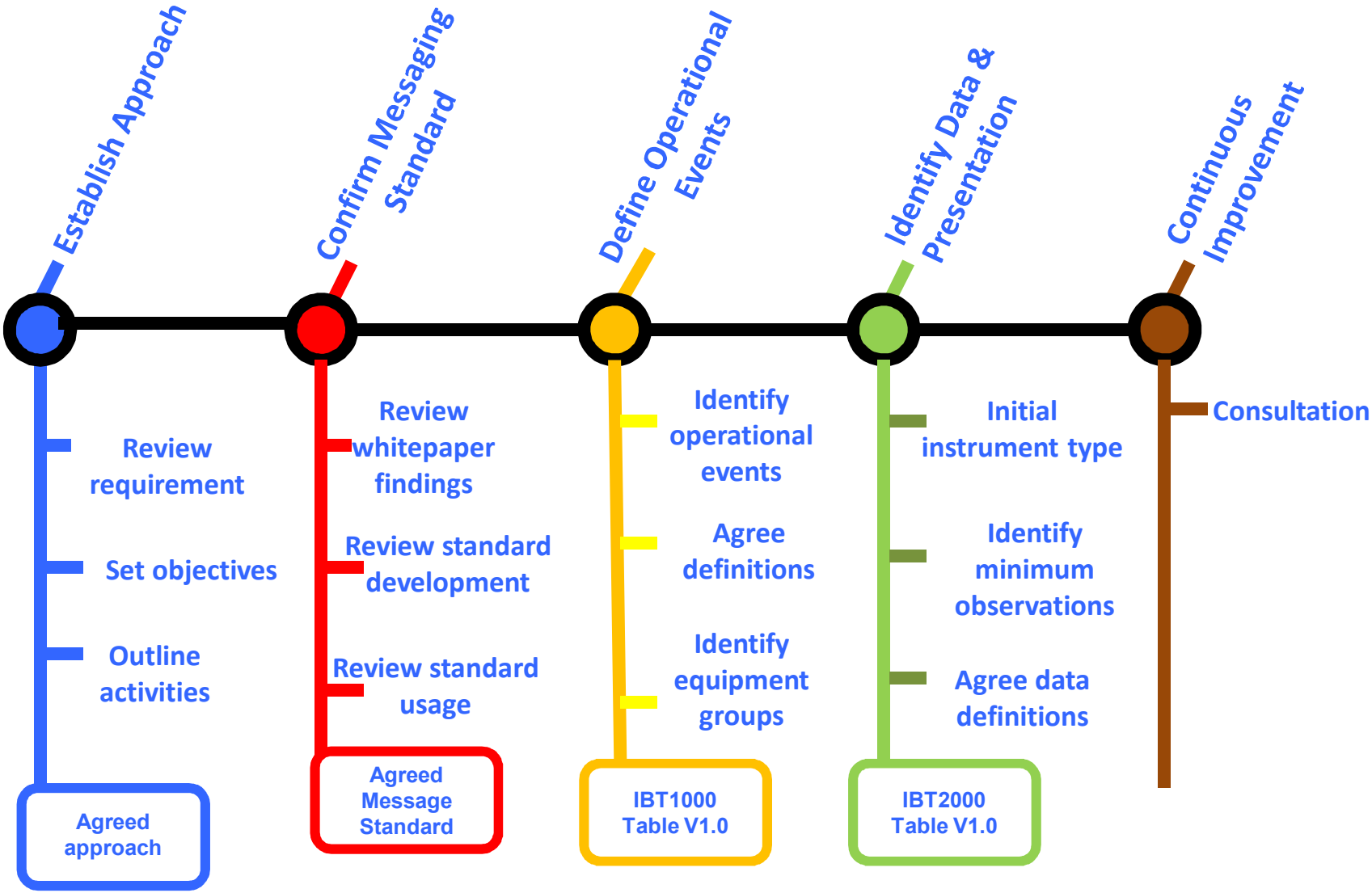
IBT1000 Table V1.0
Choose example instrument type
Identify minimum observations
Agree data definitions
IBT2000 Table V1.0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Identify Data & Presentation
Initial instrument type
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IBT2000 Table V1.0
Continuous Improvement
Consultation

Delivery

I2B Interface Standard proposal comprising of:

- HL7 Message Structure
- Observation Type reference table (IBT1000)
- Observation reference table (IBT2000)

HL7 Message Structure

ORU (unsolicited observation message) for I2B messages

High Level Structure:

- MSH – message header
- PID – patient identification (optional)
- OBR – observation request
- OBX - observation

Observation Type Reference Table IBT1000

Identifier Code	***Encoded Text***	***Observation Type Description***	***Examples***
00001	Pre-collection screening	An activity conducted to collect or evaluate data to assess a person's suitability to provide blood, tissue or cells	*Haemoglobin Analyser (laboratory and point of care)* *Weighing Machine* *Blood pressure monitor/Pulse rate* *Height Measure/Measurement* *Thermometer*
00002	Collection	An activity undertaken with the aim of acquiring blood or blood components from a person	*Weight Shaker/Blood Mixer* *Apheresis Machine*
00010	Bacterial detection	An activity involved in testing a sample for the presence of bacteria	*bacterial detection system*
00011	RBC Antibody Identification	An activity to determine the specificity of an atypical antibody	*Red Cell Serology Analysers*
00012	RBC antibody screening	An activity to detect atypical antibodies in a sample	*Red Cell Serology Analysers*
00013	TTI screening	An activity conducted to detect the presence of specified transfusion transmitted infection markers	*TTI Test Analysers*

Observations Reference Table IBT2000

OBX 3^1 Identifier Code	Observation Description	OBX 3^2 Encoded text	OBX 2 Value Type (of result in OBX5)	OBX 5 Acceptable Observation Values	OBX 6 Units (of observation value)
00001	Duration of blood draw in seconds	Collection Duration	NM	Six digit integer e.g. 28800	s
00002	Net volume of blood drawn expressed in millilitres. Excludes volume of anticoagulants/additives	Collection Volume	NM	four digit integer 0485 0621 Etc.	ml
00003	Start date and time of a process	Process start	DT	Precision should be to the second level. The time zone offset from UTC should be used as specified for the date/time data type in HL7	N/A
00022	Human T-Lymphotrophic Virus I/II Antibody	HTLV	ST	R NR IND	N/A
00023	Syphilis Antibody	SYPHILIS	ST	R NR IND	N/A
00024	Malaria Antigen	MALARIA	ST	R NR IND	N/A

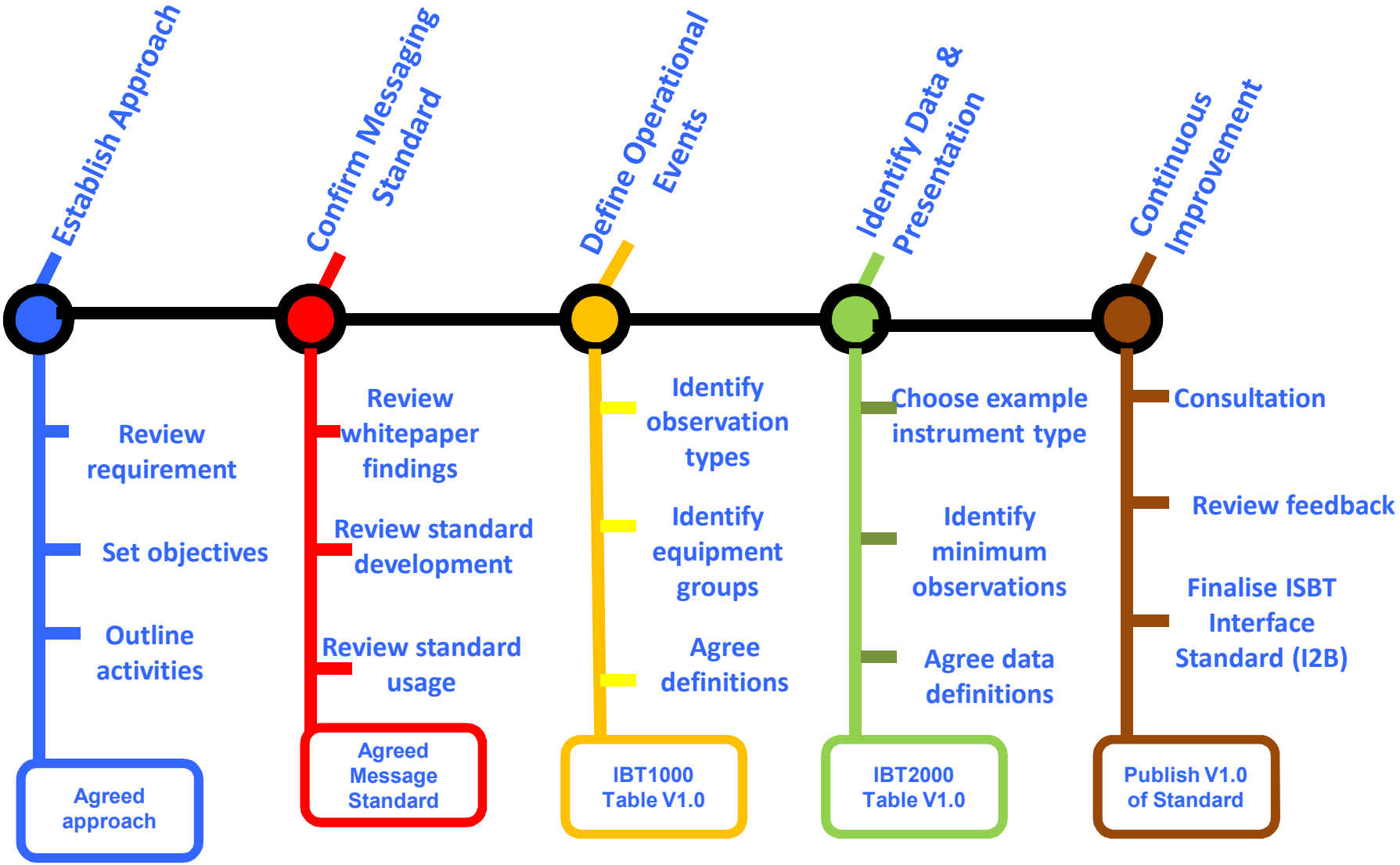
What's next?

Out for Consultation

Asking for your Feedback

Address Feedback

Publish
ISBT Interface Standard (I2B) Version 1.0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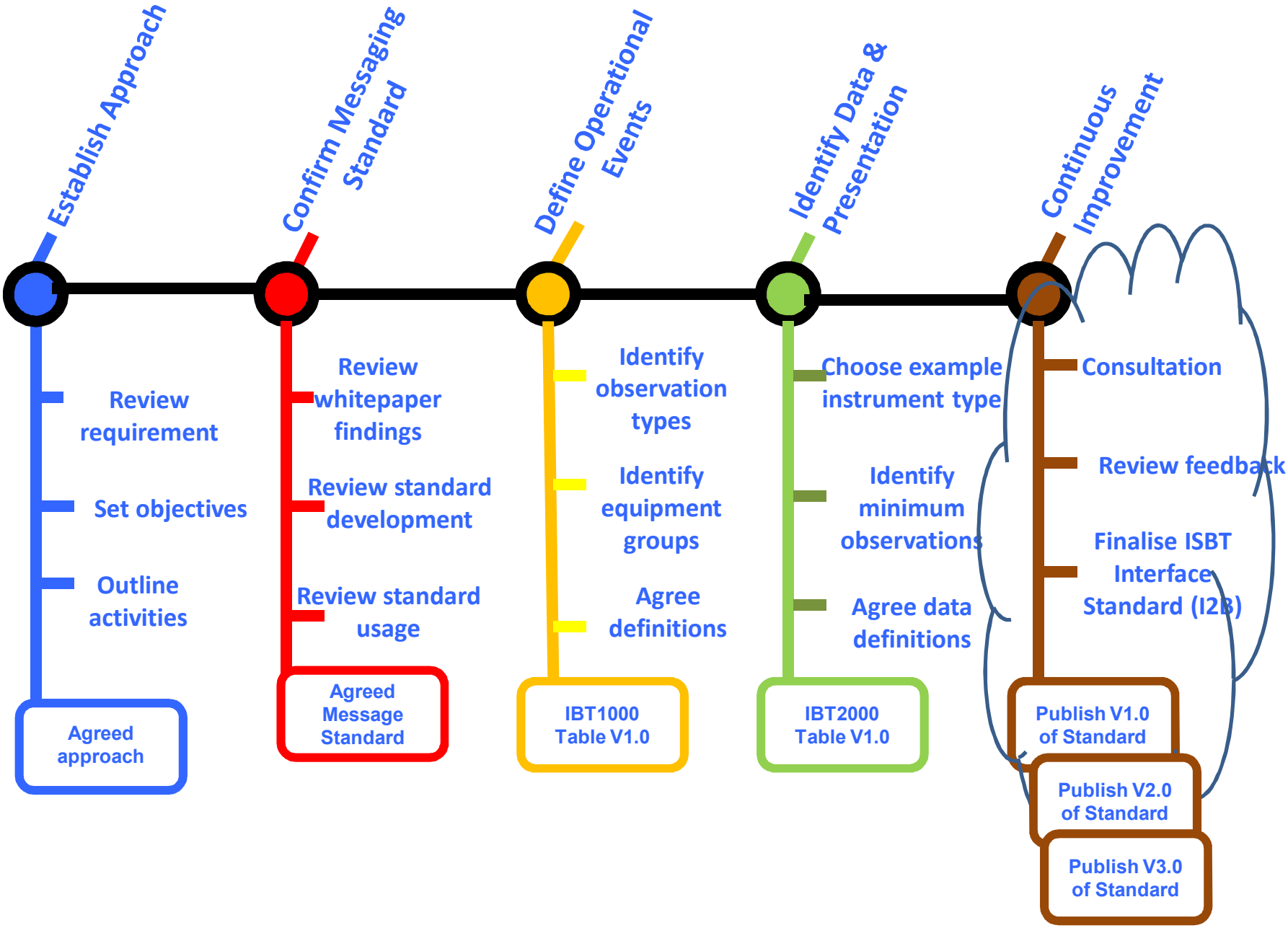
Finalise ISBT Interface Standard (I2B)
Publish V1.0 of Standard

Going Forward

Addition of observations in IBT2000 reference table for other equipment types

Identify opportunities for early adopters

Review & update of the I2B Interface Standard by a process of continuous improvement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Publish V2.0 of Standard
Publish V3.0 of Standard