

# Managing Medical Device Competences

Records Management for Large Datasets with Limited Resources

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Integra (e-Quip) Ltd 14/11/2019

# Records Management in Context



# What kind of Records are we Talking About?

TNAReport\_20-06-2019\_141227.XLSX - Excel

Graham Stanbury

File Home Insert Page Layout Formulas Data Review View Help Team Tell me what you want to do

Clipboard Font Alignment Number Styles Cells Editing

E18 7

Person			Location	Total Required	Total Achieved	%	Applix FK Feeding Pump Various			Injectomat Syringe Pump Various			Yolumat Infusion Pump Various			GE Carescape V100 Dinamap Various			Genius 2 Thermometer Various			Laerdal Suction P							
Surname	First Name	Grade					Requir	Achiev	Ok	Training Date	Requir	Achiev	Ok	Training Date	Requir	Achiev	Ok	Training Date	Requir	Achiev	Ok	Training Date	Requir	Achiev	Ok				
		Staff Nurse	Ward 10	103	37	35.92%	9	3	33.33%		9	8	88.89%	09/11/2018	9	8	88.89%	09/11/2018	19	8	42.11%		19	11	57.89%		19	6	31.58%
		Healthcare Assistant	Ward 11	4	2	50.00%	-	-	-		-	-	-		-	-	-		-	-	-		-	-	-		-	-	-
		Healthcare Assistant	Ward 12	4	0	0.00%	-	-	-		-	-	-		-	-	-		-	-	-		-	-	-		-	-	-
		Sister/Charge Nurse	Ward 13	7	6	86.00%	-	-	-		-	-	-		-	-	-		-	-	-		-	-	-		-	-	-
		Trainee Practitioner	Ward 14	4	2	50.00%	-	-	-		-	-	-		-	-	-		-	-	-		-	-	-		-	-	-
		Sister/Charge Nurse	Ward 15	7	4	57.00%	-	-	-		-	-	-		-	-	-		-	-	-		-	-	-		-	-	-
		Staff Nurse	Ward 16	7	4	57.00%	-	-	-		-	-	-		-	-	-		-	-	-		-	-	-		-	-	-
		Healthcare Assistant	Ward 17	4	1	25.00%	-	-	-		-	-	-		-	-	-		-	-	-		-	-	-		-	-	-
		Staff Nurse	Ward 18	7	3	43.00%	-	-	-	16/06/2011	-	-	-	07/03/2017	-	-	-	07/03/2017	-	-	-		-	-	-		-	-	-
		Clerical Worker	Ward 19				-	-	-		-	-	-		-	-	-		-	-	-		-	-	-		-	-	-
		Healthcare Assistant	Ward 20	4	0	0.00%	-	-	-		-	-	-		-	-	-		-	-	-		-	-	-		-	-	-
		Healthcare Assistant	Ward 21	4	0	0.00%	-	-	-		-	-	-		-	-	-		-	-	-		-	-	-		-	-	-
		Staff Nurse	Ward 22	7	4	57.00%	-	-	-	04/10/2013	-	-	-	30/12/2014	-	-	-	30/12/2014	-	-	-	06/03/2014	-	-	-	#####	-	-	-
		Staff Nurse	Ward 23	7	4	57.00%	-	-	-		-	-	-	30/12/2014	-	-	-	30/12/2014	-	-	-	06/03/2014	-	-	-	#####	-	-	-
		Sister/Charge Nurse	Ward 24	7	4	57.00%	-	-	-	#####	-	-	-	28/09/2012	-	-	-	28/09/2012	-	-	-	06/03/2014	-	-	-	#####	-	-	-
		Staff Nurse	Ward 25	7	1	14.00%	-	-	-		-	-	-	27/01/2009	-	-	-	01/03/2010	-	-	-		-	-	-	#####	-	-	-
		Healthcare Assistant	Ward 26	4	0	0.00%	-	-	-		-	-	-		-	-	-		-	-	-		-	-	-		-	-	-
		Healthcare Assistant	Ward 27	4	0	0.00%	-	-	-		-	-	-		-	-	-		-	-	-		-	-	-		-	-	-
		Healthcare Assistant	Ward 28	4	0	0.00%	-	-	-		-	-	-		-	-	-		-	-	-		-	-	-		-	-	-
		Healthcare Assistant	Ward 29	4	0	0.00%	-	-	-		-	-	-		-	-	-		-	-	-		-	-	-		-	-	-

TNA Locations Services Devices Config

Ready Display Settings 62%

# A Data Point or Competence Record

- The intersection of 1 person with 1 device is a data point
  - Alice Brown / Volumat
- The total number of records is:
  - *People x Devices*
- Note that the person and the device are not part of the competence record

Person	T34	Volumat	Dinamap	...
Mary Smith	...	...	...	...
Alice Brown	...	...	...	...
...	...	...	...	...

# What Information is in a Competence Record?

- In e-Quip a competence record is primarily defined as a **requirement** and an **achievement**
  - What level of competence is required (by this person for this device)?
  - What level of competence has been achieved (by this person for this device)?
- Both are needed
  - Achievement without requirement is not compliance
- We use competence levels because different people use devices in different ways
- There are actually several data items at each point
  - Names (trainer, assessor), Dates (training, assessment) etc.

# An e-Quip Competence Record

TNA Record Properties

General

Personnel and Device Details

Staff Name: Nicola Fraser  
Grade: Staff Nurse  
Clinical Role:   
Work Location: Acute Assessment Unit  
Work Service (Department): Surgery  
Specialty:   
Professionally Registered:   
Long-term Leave:   
Maternity Leave:   
Model: Pro 6000  
Category: Tympanic Thermometer  
Brand: Braun  
Requirement (Policy):   
Method:   
Training Course:   
Risk Level: High

Linked Documents  
Quick Link

Details Notes

Required Competence Level: User  
Achieved Competence Level: Trainer

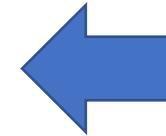
Training Date: (none)  
Assessment Date: (none)  
Declaration Date: (none)  
Verification Date: (none)

Trainer:   
Assessor:   
Calculated Review Date: (none)  
Status: <None>

Trained  
 Self-Certified

Alternative Review Date: (none)  
Last Training Date: (none)

Save & Close Cancel



This is not part of the record

# What does “Compliant/Competent” Mean?

- Competence levels are given numeric values by an administrator, maybe:
  - 1 = Decontamination
  - 2 = Setup/Check
  - 3 = User
  - 4 = Assessor
  - 5 = Trainer
- If the achieved competence level is greater than or equal to the required competence level, then that person is compliant

# How Much Data is “*Too Much*”?

- Barts
  - 7,000 current staff across multiple hospitals
    - 36,000 including historical data
  - They train on 400 models
  - This represents almost 3 million data points
    - 14 million if you include historical data
- There are 3 people in the training team
- Records management is only part of their jobs
  - They plan and deliver the training as well

# Coping with “Big Data”

- Some strategies for coping with masses of data with a small team
  - Get a bigger team!
    - Difficult, but might not actually solve the problem
- The strategies that I would like to talk about are slightly more practical:
  1. Use a database (if you don't already)
  2. Reduce the amount of data which needs to be processed
  3. Automate as many processes as possible
  4. Use tools which process data in bulk
    - ❖ Get away from TNAs for data entry
  5. Let people manage their own data

# Why are Excel TNAs so Common?

Attendance Record

	NAME	1/1/2009	1/8/2009	1/15/2009	1/22/2009	1/29/2009	2/5/2009	2/12/2009	2/19/2009	2/26/2009	3/5/2009	3/12/2009	3/19/2009	#	%
1	Tom Dalaney	x	x	x		x	x	x	x	x		x	x	10	83.3%
2	Jim Smart		x	x	x	x	x	x	x			x	x	9	75.0%
3	Sue Tracey	x	x		x	x	x		x	x	x		x	9	75.0%
4	Grace Kali	x	x	x		x	x	x	x	x		x	x	10	83.3%
5	Paul Sator		x	x	x	x	x	x	x			x	x	9	75.0%
6														0	0.0%

- A TNA is a natural progression from a student register, so this format was obvious and intuitive to educators
  - You just use the columns for devices and put the dates where the crosses are
- From the mid-1990's spreadsheets became easier to use and were widely available on Trust PCs

# The “Obvious” Drawbacks of Spreadsheets

- They get less robust as they get larger
- They are difficult, if not impossible, to use with multiple, simultaneous users
- They don't support a usable level of user access control / permissions
- They don't support meaningful audit
- They can't effectively validate data
  - A database can give you customisable validation
- ...

# The Biggest Limitation - Information Retrieval

- Any collection of information is only as useful as its information retrieval mechanism
  - Databases win this contest hands-down
- Information retrieval is more than just reporting, it's about turning your data into information
- It can be broken down into:
  - Finding “stuff”
    - Essential for “*Prove it!*”
  - Finding “information”
    - Analysing groups of records to gain insights
    - Essential for “*Improve it!*”



# Simple Searches

- Easier than searching your Inbox

All Unread  × Current Folder ▼

Current Mailbox ▼  
Current Folder  
Subfolders  
Current Mailbox  
All Outlook Items

Look for:  Look in: Location ▼

Look for:  Look in: Model ▼

Look for:  Look in: Staff Grade ▼

Look for:  Look in: Staff Name ▼

# Even Easier - Single-Click Searching

- Available on every value on every screen
  - I wish I could do this in Outlook!

Personnel and Device Details

 Staff Name:  

Grade:

Work Location:  Work Service (Department):

Professional  Maternity Leave

Model:    Category:



Clinical Role:

Specialty:

Brand:

 [Linked Documents](#)

 [Quick Link](#)

**Search Menu:**

- Quick Filter
- Quick Search** ACCU
- Sticky Filter
- Sticky Search

# Complex Searching – the TNA Finder

- “Find all the HCAs in Elective Services who were trained by Mary on high-risk devices in March 2015 and who will need refresher training within 6 weeks”

TNA Finder

The TNA Finder allows you to easily search for staff competence records using the most common search fields. For date ranges, if you enter both dates then all this is interpreted as BETWEEN. If you enter the 1st date only this is interpreted as SINCE, while if you only enter the 2nd, this is taken to mean BEFORE

Only Show Self-Certified Records?  Yes  No  Either

Only Show People who have been Trained?  Yes  No  Either

Competence Achieved is less than Competence Required

Competence Required is less than Policy

Competence

Required Level:    Is not Empty

Achieved Level:    Is not Empty

Competence Group:

People

Staff Name:

Grade:

Clinical Role:

Specialty:

Location:

Site:

Service:

All Staff  Professionally Registered Staff Only

Training Date:  --

Assessment Date:  --

Declaration Date:  --

Verification Date:  --

Review Date:  --

Devices

Risk Level:

Brand:

Model:

Category:

Trainer:

Assessor:

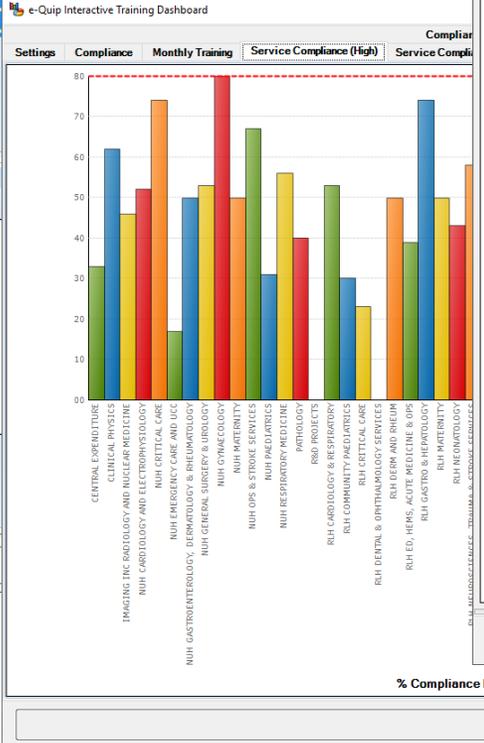
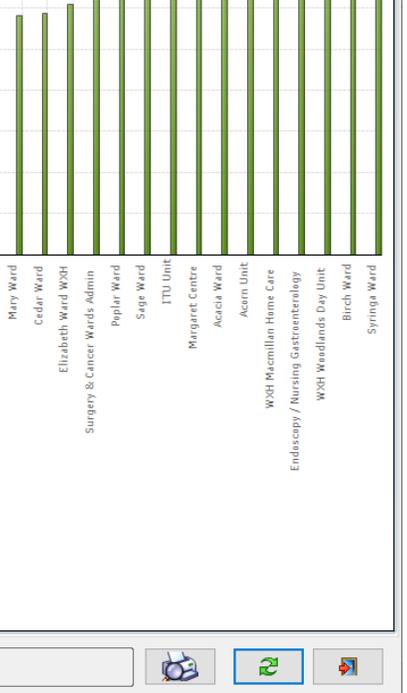
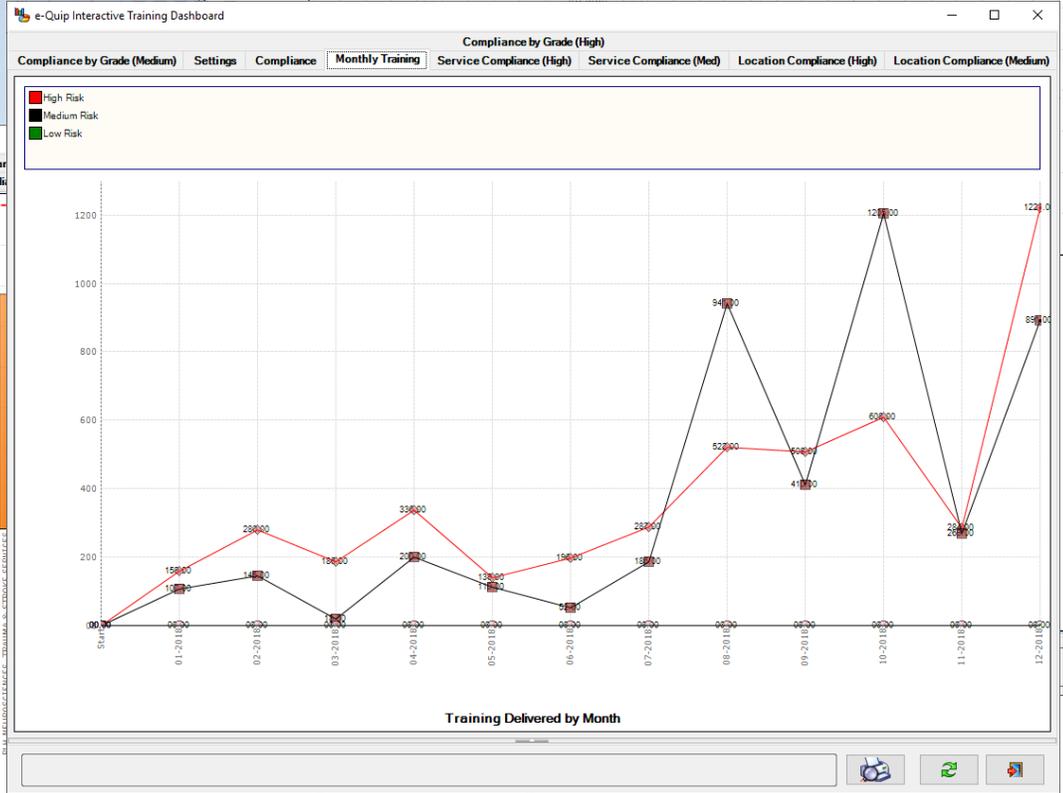
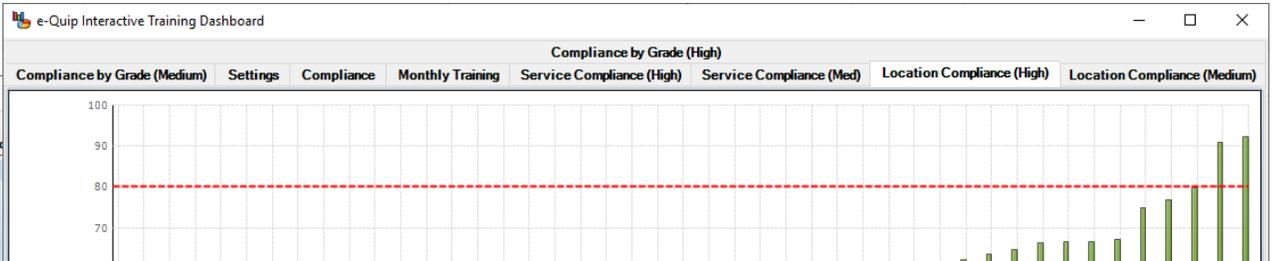
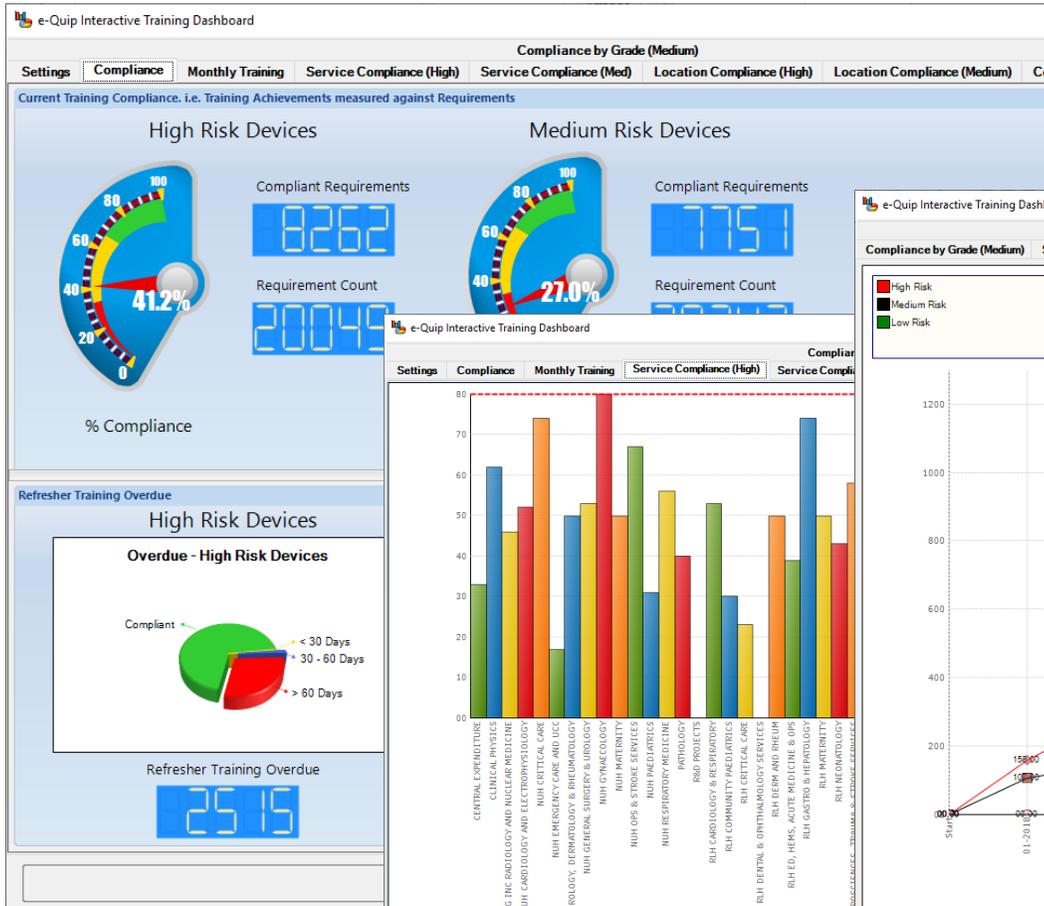
Status:

Review Due Within  Weeks

# Getting real Insights to your Data - the Dashboards

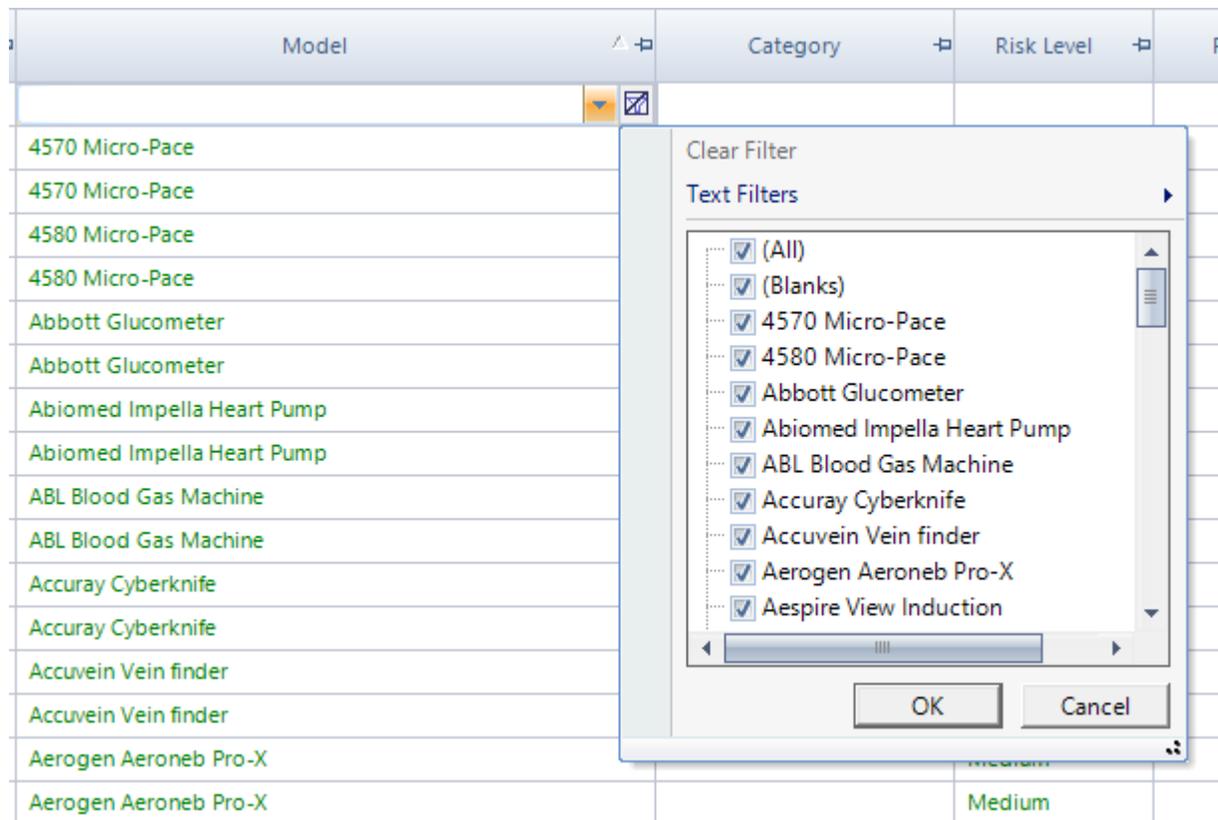
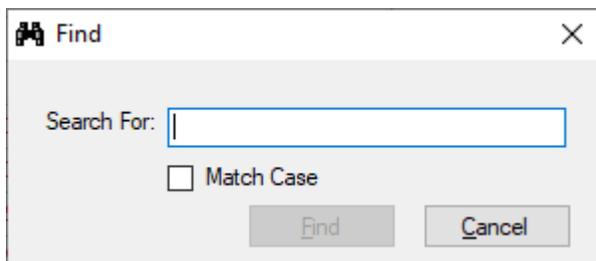
- Dashboards collect data and analyse it to give useful, meaningful information
- You can report on your entire dataset or restrict it specific groups
- You can also group your analysis by things like:
  - Risk Level
  - Ward
  - Department
  - Staff Grade
- The dashboards are also search tools – you can use them to find the underlying data that the analysis is based on
  - Every chart or graph is “live”
    - Double-clicking any data point will show the records which have been analysed

# The Dashboard



# What do you get with Excel?

- *Ctrl + F* (Find)
- Column Filters
  - e-Quip gives you these as well



A screenshot of an Excel spreadsheet showing a column filter applied to the 'Model' column. The filter dialog box is open, showing a list of model names with checkboxes next to them. The 'Model' column contains the following items: 4570 Micro-Pace, 4570 Micro-Pace, 4580 Micro-Pace, 4580 Micro-Pace, Abbott Glucometer, Abbott Glucometer, Abiomed Impella Heart Pump, Abiomed Impella Heart Pump, ABL Blood Gas Machine, ABL Blood Gas Machine, Accuray Cyberknife, Accuray Cyberknife, Accuvein Vein finder, Accuvein Vein finder, Aerogen Aeroneb Pro-X, and Aerogen Aeroneb Pro-X. The 'Risk Level' column shows 'Medium' for the last two rows.

Model	Category	Risk Level
4570 Micro-Pace		
4570 Micro-Pace		
4580 Micro-Pace		
4580 Micro-Pace		
Abbott Glucometer		
Abbott Glucometer		
Abiomed Impella Heart Pump		
Abiomed Impella Heart Pump		
ABL Blood Gas Machine		
ABL Blood Gas Machine		
Accuray Cyberknife		
Accuray Cyberknife		
Accuvein Vein finder		
Accuvein Vein finder		
Aerogen Aeroneb Pro-X		Medium
Aerogen Aeroneb Pro-X		Medium

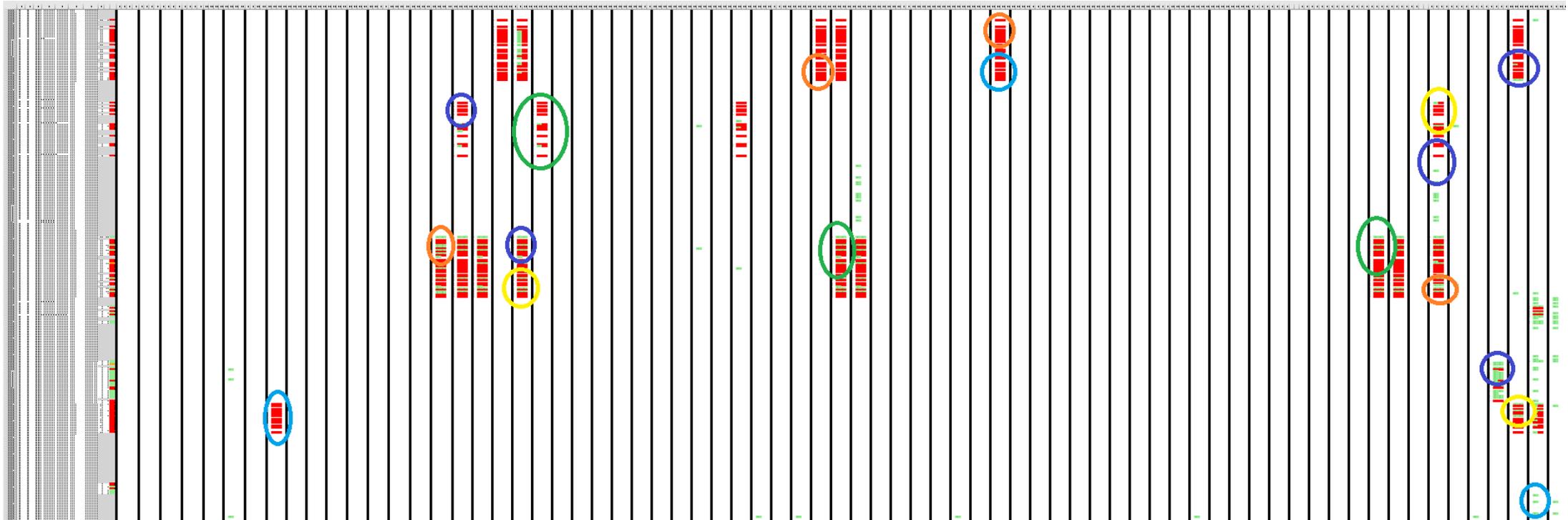
# Strategy 2 – Reduce the Amount of Data

## 2a. Define Training Requirements

- Nobody needs to appear on a TNA if they don't need to be trained
- Until a requirement is specified there are **zero** data points
- Stating a requirement generates a data point
  - *“Mary Smith needs to use the T34”*
  - There will now be 1 row and 1 column in the TNA
- The number of data points changes from:
  - *Number of People x Number of Devices*
- to
  - *Number of Requirements*
- Isn't this “Smoke & Mirrors” - does it really shrink your data?
  - As soon as you add the requirements, won't the “big data” problem reappear?

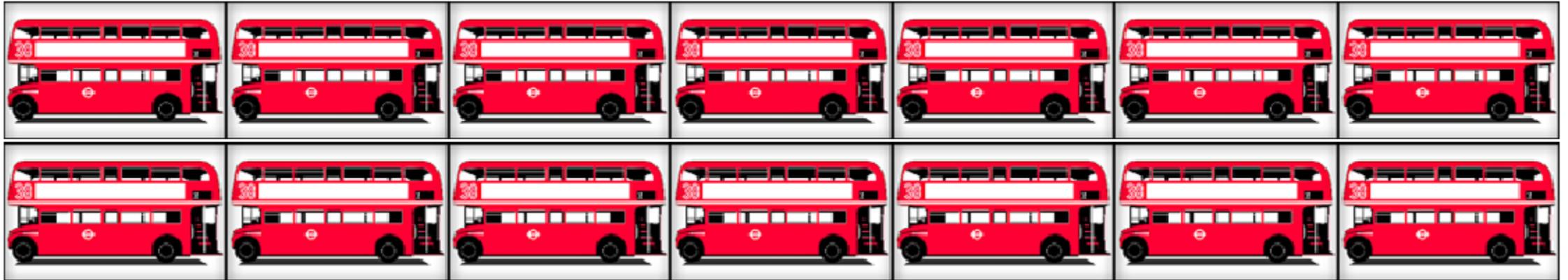
## 2b. Reduce Size by Localising the Data

- TNAs are “Sparse”
  - They are mostly empty space
  - The data appears in “clumps”



# Displaying a Readable TNA

Without zooming in, this is how big Barts TNA would be in Excel:  
(Width and Height swapped)  
Almost all of that space would be empty!  
Just the windows!



# Localise the Data – Just Manage the “Clumps”

## Competence Groups

- 7,000 Staff and 400 Devices = 2.8 million data points
  - Does every person use every device?
- A Competence Group is a collection of people and the devices that they *probably* use
  - Intuition says that this will most commonly be based on location
- Barts have 267 competence groups
  - The most people in one group is 360 (average = 24)
  - The most devices in one group is 40 (average = 8)
- They have fewer than 70,000 data points to manage

# Competence Groups

- This not exactly news!
  - For years trainers have maintained separate spreadsheets for each department or ward
- But we've seen the problems with spreadsheets
  - Things are complex when someone moves from one ward to another
    - You can't just cut & paste a row from one spreadsheet to another because the columns will be different
  - Cross-department searching and analysis very complex
    - Just finding a person could involve checking hundreds of spreadsheets!
- This might be obvious, but once it has been formalised, lots of other benefits become apparent, as we'll see

# Strategy 3 – Use Automation Wherever Possible

## 3a. Training Policies

- Earlier I suggested that defining training requirements reduces the size of your data
  - But you still have to specify the requirements for thousands of people and hundreds of devices
- Putting your policies into the database allows this to be automated
- A simple example:
  - *“Healthcare Assistants must be trained to use the Arjo Encore Patient Hoist”*
- Barts have 1,800 HCAs. This policy will therefore automatically set up to 1,800 training requirements
  - Why “up to”?
  - The requirements will only be set for those HCAs in competence groups which contain Arjo Encore hoists

# Two Approaches to Policies Grade

- Staff Grade
- Clinical Role

The screenshot displays two overlapping windows from a software application, both titled 'Model Properties'. The top window is focused on the 'Competence Policy (by Grade)' tab, showing an information message: 'The list below shows the competence level required by varying staff grades for this model. If Auto-Update is selected then all competence groups will be automatically updated whenever this value changes.' The bottom window is focused on the 'Competence Policy (by Role)' tab, also showing an information message: 'The list below shows the competence level required by various clinical roles for this model. If Auto-Update is selected then all competence groups will be automatically updated whenever this value changes.' Below the message in the bottom window is a table with the following data:

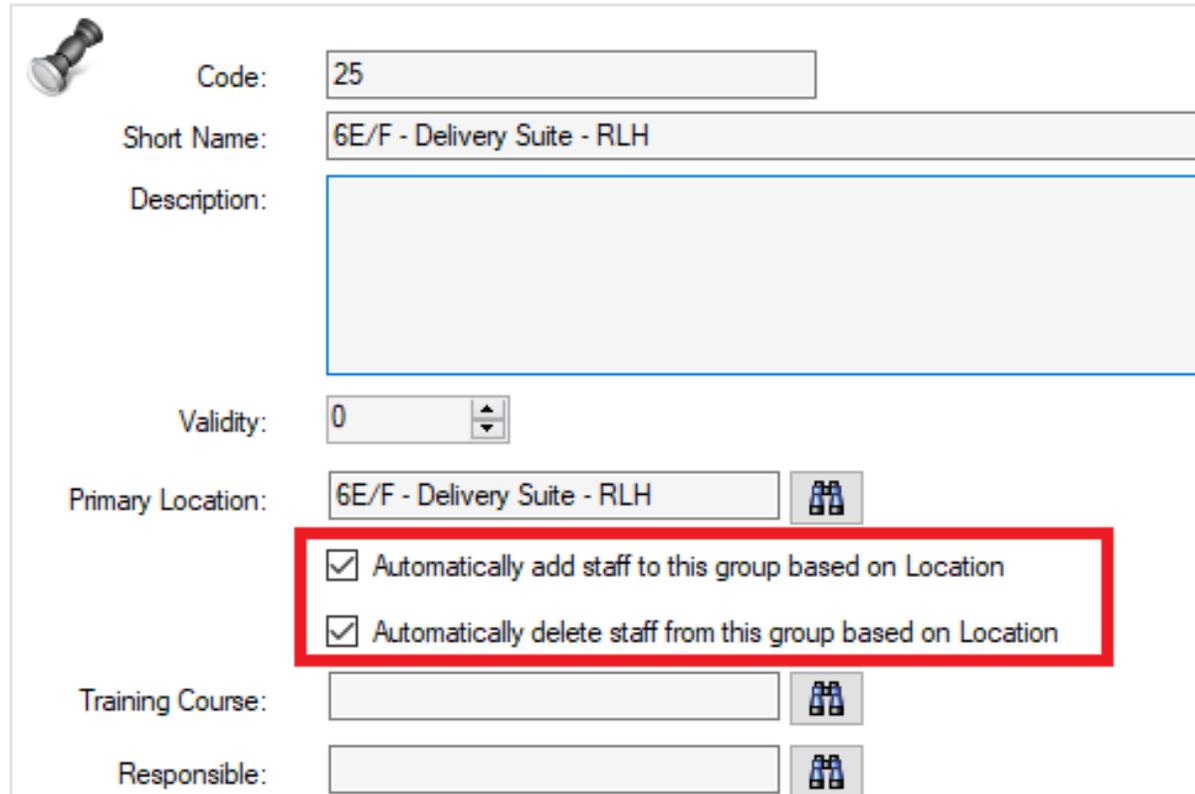
Clinical Role	Required Competence	Method	Training Course	Auto-Update	Mandatory
Community Nurse	User	Formal Training		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Palliative Care Nurse	User	Formal Training		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Scrub Nurse	User	Formal Training		<input checked="" type="checkbox"/>	<input type="checkbox"/>

# Strategy 3 – Use Automation Wherever Possible

## 3b. Handling Staff Movements

- What needs to happen when a nurse moves from one ward to another?
  - She must be removed from the competence group for her old ward
  - She must then be added to the competence group for her new ward
  - If the move means that she no longer needs to use certain devices, then:
    - Her requirements for those devices must be cleared
    - If she has been trained on those devices then those training details must be archived
  - If she is moving to a ward with new devices, then:
    - Her requirements for those devices must be set
    - If she has previously been trained on any of those devices then her training details must be brought back from the archive

# This can all be Automated Using Competence Groups



 Code:

Short Name:

Description:

Validity:

Primary Location:  

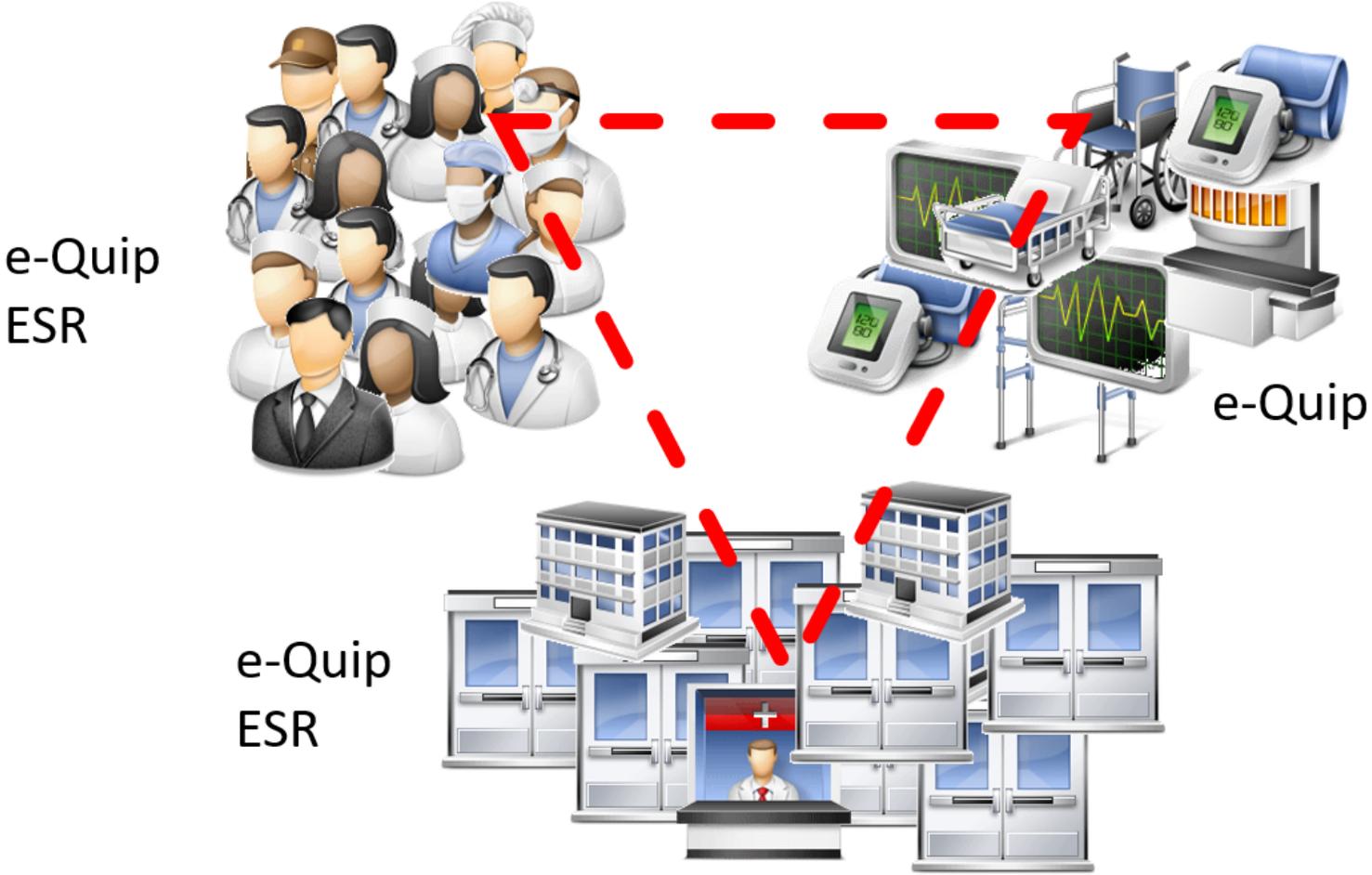
Automatically add staff to this group based on Location

Automatically delete staff from this group based on Location

Training Course:  

Responsible:  

# 3c. More Automation – The ESR Import



## 3c. More Automation – The ESR Import

- The best source of personnel information is the ESR
- It is possible to get weekly or monthly downloads from ESR which contain a list of all of the staff in the hospital, including:
  - ESR assignment no, name, staff grade, role and title, work location and department
- e-Quip allows this to be imported. This will:
  - Create new starters
  - Assign staff to the appropriate competence group(s) automatically
  - Remove people from competence groups if appropriate
  - Flag leavers

# Strategy 4 – Processing Data in Bulk

## 4a. Example - Setting Training Requirements

- Suppose that you choose not to record your training policies in e-Quip. You have the problem of defining thousands of training requirements which can't then be handled automatically
  - When we defined a policy for HCAs and the Arjo hoist, up to 1,800 requirements were created automatically
- You can achieve exactly the same thing using the *Bulk Update* utility
- It is useful in many other situations as well:
  - Changing staff work locations without using the ESR import
  - Recording training for multiple people on several devices

# Bulk Update - 1. Find all the HCAs & Encore Hoist TNA Records

The screenshot shows a software interface for finding records. At the top, there is a search bar with 'Look for: ENCORE' and 'Look in: Model'. Below this is a table titled 'SQL2K8-DEVICETRAINING Competence Matrix'. The table has columns for Competence, First Name, StaffGroup, Staff Grade, Model, and Risk Level. A filter dialog box is open over the 'Staff Grade' column, showing a list of staff grades with checkboxes. The selected grades are: Health Care Support Worker, Healthcare Assistant, and Nursing Assistant. The dialog box also has 'Clear Filter' and 'Text Filters' options, and 'OK' and 'Cancel' buttons.

Competence	First Name	StaffGroup	Staff Grade	Model	Risk Level
			(Custom)		
1	A & E - Majors Service	x	Additional Clinical Services	Healthcare Assistant	
2	A & E - Majors Service	x	Additional Clinical Services	Health Care Support Worker	
3	A&E - Majors Service	x	Additional Clinical Services	Health Care Support Worker	
4	A&E - Majors Service	x	Additional Clinical Services	Health Care Support Worker	
5	A & E - Majors Service	Angelika	Additional Clinical Services	Nursing Assistant	
6	A & E - Majors Service	Louise	Additional Clinical Services	Healthcare Assistant - Specials	
7	A & E - Majors Service	Maria	Additional Clinical Services	Healthcare Assistant - Specials	
8	Nightingale Ward	Lavern	Additional Clinical Services	Nursing Assistant	
9	A & E - Majors Service	Ramona	Additional Clinical Services	Nursing Assistant	
10	Faraday Ward	Androulla	Additional Clinical Services	Nursing Assistant	
11	A & E - Majors Service	Clarence	Additional Clinical Services	Senior Nursing Assistant	
12	A & E - Majors Service	Clive	Additional Clinical Services	Nursing Assistant	
13	A & E - Majors Service	Coyla	Additional Clinical Services	Nursing Assistant	
14	Faraday Ward	Cynthia	Additional Clinical Services	Nursing Assistant	
15	A & E - Majors Service	x	Additional Clinical Services	Health Care Support Worker	
16	Faraday Ward	Dorota	Additional Clinical Services	Nursing Assistant	Arjo Encore Patient Hoist
17	A & E - Majors Service	Folashade	Additional Clinical Services	Nursing Assistant	Arjo Encore Patient Hoist
18	Faraday Ward	Hilary	Additional Clinical Services	Nursing Assistant	Arjo Encore Patient Hoist

# Bulk Update - 2. Update them all with a Single Mouse Click

TNA Bulk Update

 This utility allows you to update multiple TNA records in a single action.

Required Level:  

Achieved Level:  

 Training Date:  

 Assessment Date:  

 Declaration Date:  

 Verification Date:  

 Alternative Review Date:  

 Last Training Date:  

 Trainer:  

 Assessor:  

Status:  

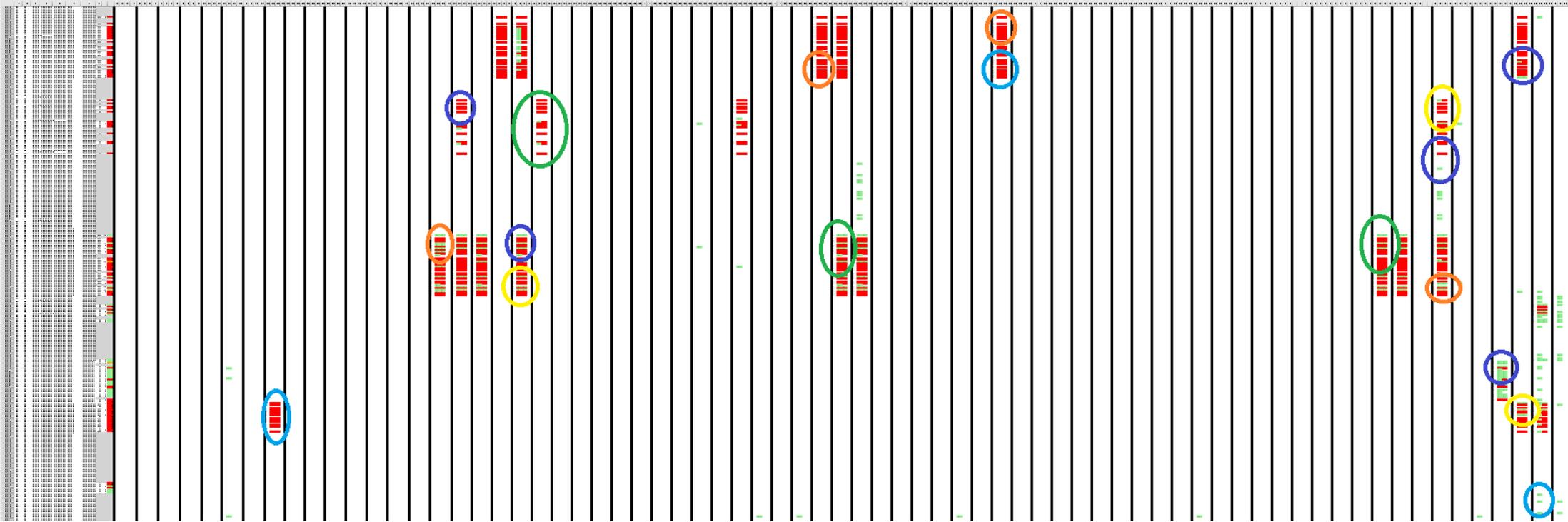
Trained

Self-Certified

Notes:

# More Realistic Bulk Update

How can I select multiple people and models from this?



...or this?



Basically, you can't!

# Smoke & Mirrors?

- On the last Bulk Update slide the screen looked a lot like a TNA
  - 1 row per person
  - 1 column for the Arjo Encore Hoist
- However, I had deliberately employed some sleight-of-hand and chosen a single device so that you didn't see anything unusual
- What if I chose 2 people and 2 devices
  - A cross-tab TNA would show 2 rows and 2 columns

# This doesn't Look like a TNA!

- Now we have 4 rows
  - 2 per person
- But still only 1 device column
- What if we chose 3 people and 2 devices?

First Name	StaffGroup	Staff Grade	Model	Risk Level	Required Level	Achieved Level
			(Custom)			
Marilyn	Nursing and Midwifery Registered	Clinical nurse specialist Lung	CME T34 Syringe Driver	5	User	
Marilyn	Nursing and Midwifery Registered	Clinical nurse specialist Lung	Volumat Infusion Pump	5	User	
Raj	Nursing and Midwifery Registered	Nurse Endoscopist	CME T34 Syringe Driver	5	User	
Raj	Nursing and Midwifery Registered	Nurse Endoscopist	Volumat Infusion Pump	5	User	

# e-Quip doesn't use TNA's for Data Entry

- Now we have 6 rows
  - 2 per person
- And still only 1 device column
- There will always be:
  - 1 device column
  - 1 row for each person/device
- We call this the Competence Matrix

First Name	StaffGroup	Staff Grade	Model	Risk Level	Required Level	Achieved Level
			(Custom)			
Marilyn	Nursing and Midwifery Registered	Clinical nurse specialist Lung	CME T34 Syringe Driver	5	User	
Marilyn	Nursing and Midwifery Registered	Clinical nurse specialist Lung	Volumat Infusion Pump	5	User	
Raj	Nursing and Midwifery Registered	Nurse Endoscopist	CME T34 Syringe Driver	5	User	
Raj	Nursing and Midwifery Registered	Nurse Endoscopist	Volumat Infusion Pump	5	User	
Snehlata	Nursing and Midwifery Registered	Staff Nurse	CME T34 Syringe Driver	5	User	
Snehlata	Nursing and Midwifery Registered	Staff Nurse	Volumat Infusion Pump	5	User	

# The Competence Matrix

- It's the competence matrix which allows us to bulk update competence records for:
  - Multiple Staff
  - Multiple Devices
- Because the matrix has one row per competence, Bulk Update is as simple as setting one or more filters to just show the records that you want to update
  - “*Filtering*” means “*Finding Stuff*”
  - Databases do that really well

# Competence Matrix Bulk Update

- The Bulk Update screen is basically the bottom half of the TNA record

TNA Bulk Update ×

 This utility allows you to update multiple TNA records in a single action.

Required Level:	User 	Achieved Level:	User 
 Training Date:	08/08/2019 	 Trainer:	Mary Caddies 
 Assessment Date:	08/08/2019 	 Assessor:	Mary Caddies 
 Declaration Date:	(none) 	Status:	<None> 
 Verification Date:	(none) 	<input checked="" type="checkbox"/> Trained	
 Alternative Review Date:	(none) 	<input type="checkbox"/> Self-Certified	
 Last Training Date:	(none) 		

Notes:

Trained and assessed on the ward 

# Strategy 5 – Let Users Manage Their own Records

- There are two web interfaces to e-Quip training
  - A simplified version of the desktop
    - Without tools like Bulk Update
    - Allows users to manage their own data or for a Ward Clerk or Training Administrator to manage records for other people
  - A question/answer audit-based interface which asks users whether or not they use a particular device, if they are competent, etc.
- Both of these interfaces can be used alongside the desktop application

# A Web-Based Competence Matrix

+ TNA Report

- Export Grid Data

Export As Matrix Export As Cross Tab

Filtering

Look For  Look In

Staff	Employee No	Grade	Competence Group	Professionally Registered	Work Location	Service	Model	Category
Bella Ross	12345846	HCA	General Surgical In-Patient Ward	false	Juniper Ward	Elective Services	T34	Syringe Driver
Bella Ross	12345846	HCA	General Surgical In-Patient Ward	false	Juniper Ward	Elective Services	Signature SE1	Volumetric Pump
Bella Ross	12345846	HCA	General Surgical In-Patient Ward	false	Juniper Ward	Elective Services	Oxygen Dialreg 0-15LPM Bullnose	Cylinder Regulator
Bella Ross	12345846	HCA	General Surgical In-Patient Ward	false	Juniper Ward	Elective Services	LSU	Portable Suction
Bella Ross	12345846	HCA	General Surgical In-Patient Ward	false	Juniper Ward	Elective Services	Oxygen Dialreg 0-15LPM Pin Index	Cylinder Regulator
Bella Ross	12345846	HCA	General Surgical In-Patient Ward	false	Juniper Ward	Elective Services	M3535A (Heartstart MRx)	DEF001

1 2 3 4 5 6 ... Last

# A Web-Based Competence Record

 [Record Details](#)

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**Competence**

<b>Required Competence</b>	<input type="text" value="Not Required"/>	<b>Achieved Competence</b>	<input type="text" value="User"/>
<b>Trainer</b>	<input type="text" value="None"/>	<b>Training Date</b>	<input type="text" value="11/20/2017"/> <input type="button" value="-"/> <input type="checkbox"/> <b>Trained</b>
<b>Assessor</b>	<input type="text" value="None"/>	<b>Assesment Date</b>	<input type="text"/> <input type="button" value="-"/> <input checked="" type="checkbox"/> <b>Self Certified</b>
<b>Declaration Date</b>	<input type="text" value="6/20/2019"/> <input type="button" value="-"/>	<b>Calculated Review Date</b>	<input type="text" value="11/20/2020"/> <input type="button" value="-"/>
<b>Alt Review Date</b>	<input type="text" value="11/20/2020"/> <input type="button" value="-"/>	<b>Verification Date</b>	<input type="text"/> <input type="button" value="-"/>
<b>Status</b>	<input type="text" value="None"/>		

# Thank You

- Any Questions?