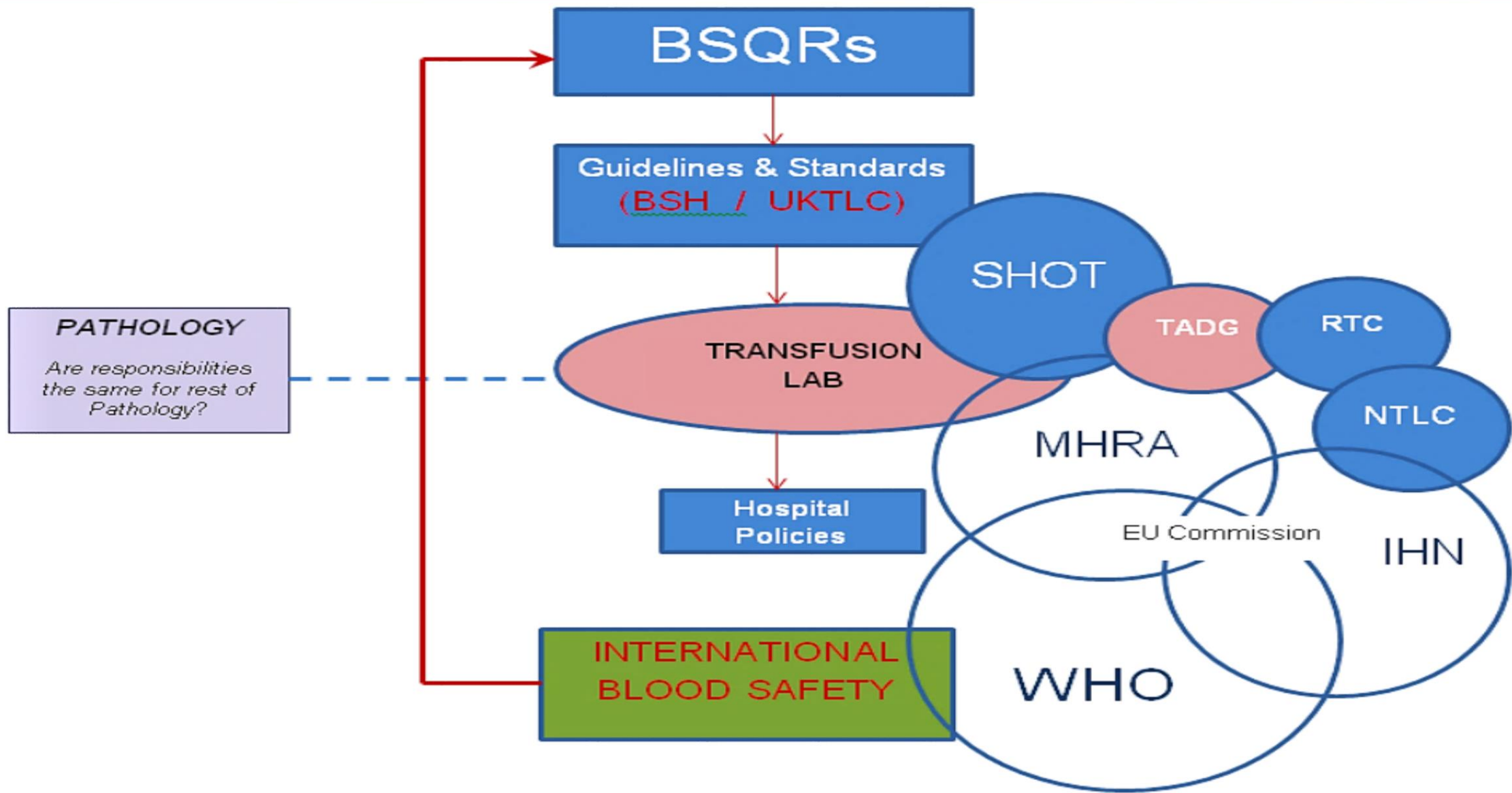


# Capacity Planning for Blood Transfusion Laboratories

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## Collective Knowledge

Knowledge that is possessed by a group or organisation and allows access to Subject Matter Experts (SME). For blood, this 'body of knowledge' influences decisions on public health.

# UK Transfusion Laboratory Collaborative

UK  
TLC



# Our Workforce

## Established

- Expertise
- Demoralised, demotivated, tired and stressed
- Lack support
- Environment of blame

## New

- More inexperienced
- Different skill set & abilities
- Keen and enthusiastic- want to help

*Time to make it right*

- Guidance & Support
- Opportunities to learn
- Right culture

# UKTLC Survey 2017



**55% of labs don't** have an agreed staffing capacity plan to cover core hours staffing levels

# Frustrations

*How do I meet the impossible requirements of the UKTLC Standards??*

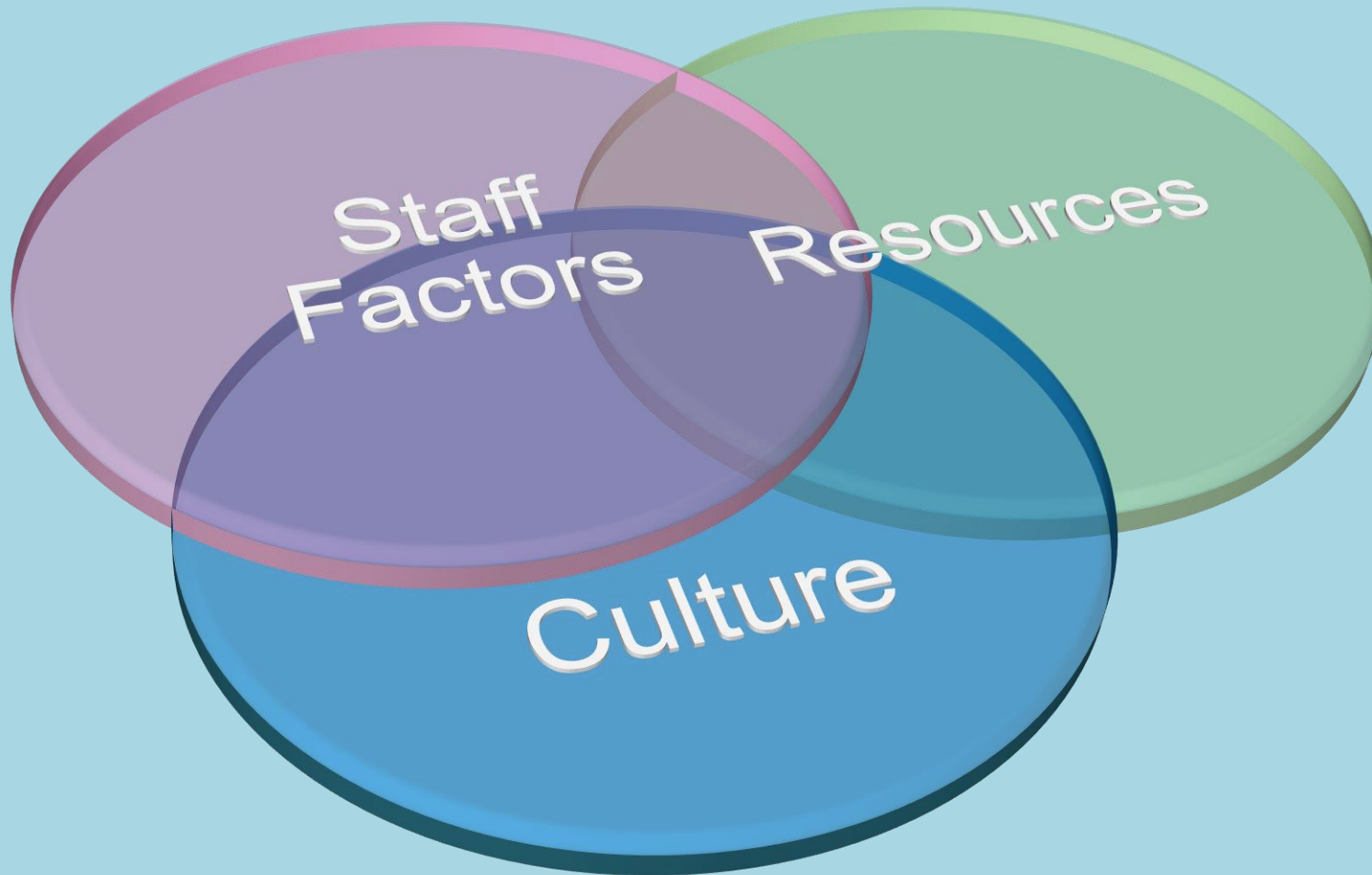
*I don't have time to check we are even following BSQR/ GPGs-let alone BSH guidelines, this is all unrealistic, and now we have ISO to contend with!!*





Edvard Munch- The Scream

# Patient Care



## **GOOD**

*Regulations & Standards  
Improvements  
Innovation  
Safety  
Teams*

## **CHALLENGES**

*Stressed teams  
Friction/ hierarchies  
Culture & Behaviours  
Resistance  
Financial  
Regulations & Standards  
Line management structures*



*We all come to work intending to do a good job, but it is mainly faulty systems & processes that let us down.*

- It's time to fix these systems
- It's time to heal our teams
- It's time to give everyone the opportunity to succeed
- It's time to change the culture

*We do this together- as a Transfusion Community*



*Breakin' rocks in the hot sun  
I fought the law and the law won  
I fought the law and the law won*

*Chief Finance Officer*

*I needed money 'cos I had none  
I fought the law and the law won  
I fought the law and the law won*

The Clash

# The Regulations: BSQRs

## GPG 2.2 (Good Practice Guidelines)

The organisation should have an adequate number of personnel with the necessary qualifications and experience.

Management has the ultimate responsibility to determine and provide adequate and appropriate resources

The responsibilities placed on any one individual should not be so extensive as to present any risk to quality.

# Effective Resource Management

- Produce your weekly and shift rotas well in advance- planning
- Delegate
- Plan attendance at external meetings in advance.
- Restrict staff leave for large planned projects
- Work cooperatively - **Communication**

**MHRA Blood Forum:** <http://forums.mhra.gov.uk/forum.php>



# Culture Change

- Improve non-conformance reporting- *build a picture*
- Remove barriers between staff
- Be open and transparent
- Find mentors/ be a mentor
- Reflect on own behaviours and set standards.
- Remove blame
- Leadership and development at ALL levels

# Review Shift Systems

- Proper shifts- or in name only ?
- For rotational staff- need to consider Haematology/ Biochemistry
- Staff are able to have an uninterrupted rest break ?
- Colleagues available on-site to assist?
- Formal 24/7 technical advisory support ?
- What work must be done/ can be left ( testing / QMS) ?
- Staffing levels during core hours- can still maintain ALL workload (testing/ QMS)



# Capacity Plan: Workload

Sample Testing	Traceability	Interaction with pharmacy	HR/Management	Internal meetings
Blood issues	Distribution of blood	Medical Records merging	Monthly Reports	Auditing
Haemovigilance	Monitoring	Training staff, clinical, porters, drivers	improvements	Supplier/ users
Equipment management	Patient Blood Management		Reviewing stats and trends	Development
Regulatory	External meetings	Blood products: medicines	CA/ PA	Process mapping
Documents/ SOPs	LIMS management	Professional work- Collective Knowledge	Incident investigations	Planning
Blood stocks	SHOT/SABRE		Validation/ Requalifying	Changes
Contracts/ reviews	Blood budget			CPD

# Time Required

Job Role : Blood bank manager	
Task	Mins or wte required/ week
Reading/ replying to emails	5hrs or 0.13wte
Clearing invoices / updating stats	2hrs or 0.05wte
Appraisals/ General HR	5hrs or 0.13wte
Internal meetings: planning, attendance	8hrs or 0.21wte
Training: seniors/ others	2hrs or 0.05wte
Incident investigations/ CAPA	15hrs or 0.4wte

Job Role : Senior BMS	
Task	Minutes Required/ week
Reading/ replying to emails	
Planning and delivering training	
Daily senior checks/ reviews	
Equipment management	
Investigating incidents / CAPA	

a) For each job role state:

- Current tasks performed
- Tasks that should be done
- Time needed for each
- Delegate tasks

b) The Team:

- BBM
- Seniors
- Quality
- BMS
- MLA
- TP
- IT support

c) Move delegated tasks into another matrix eg Senior or BMS or MLA.



# Calculations

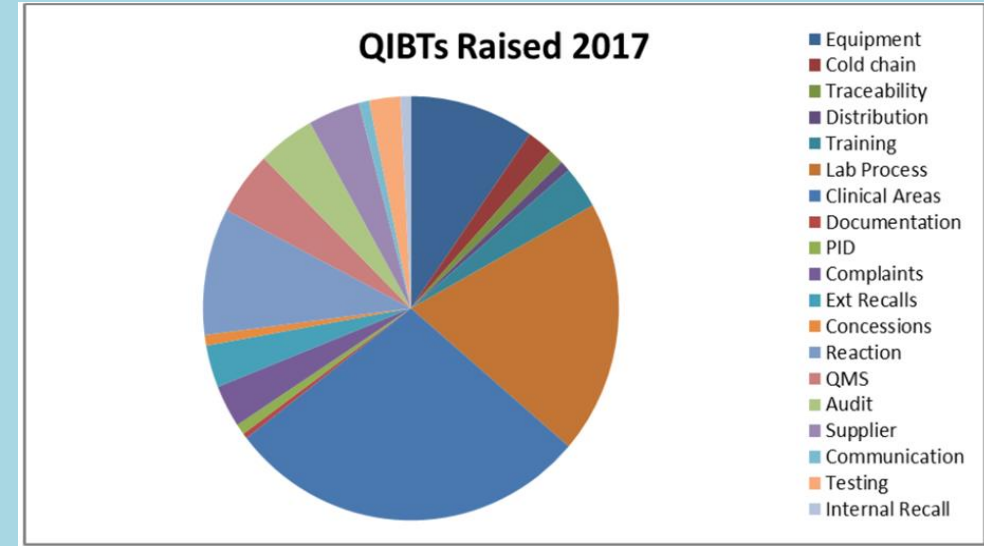
- Staff AL ( approximate 30 days/ year ?)
- Stat & Mandatory training: Approx: 3 days/ year ?
- Attendance at courses (internal/ external): 5 days/ year ?
- Approximate sickness (5 days/ year? )
- Supervised annual training for assessed staff (UKTLC): 10 days/ year
- How many staff can be given leave / day? (total staff x 30 days= ? / 220 ( no. working days (mon-fri) in a year).

**YOUR IDEAS APPRECIATED- PLEASE SHARE**

**MHRA Blood Forum:** <http://forums.mhra.gov.uk/forum.php>

# Evidence for understaffing

1. Weekly shift rotas- inadequate covering of key areas.
2. Incident database- delays with closure, PAs and CAPA checks.
3. Audit schedule –delays
4. Cleaning schedule delays.
5. Equipment PPM- delays with reviews.
6. Training schedule- delays with annual GMP, serology competencies.
7. Document reviews- delays.
8. Vacancies



## 5 Quality Indicators

a) Turn-around-times (TAT)

TEST	95% TAT	Apr-18	May-18	Jun-18	Jul-18
Group & Screen	4hrs	77.9	81.2	80.4	83.5
Antenatal G&S	24hrs	99.2	99.5	99.8	96.5
Kleihauer	24hrs	98.3	89.5	94.1	96.6
Referred	21 days	100	100	100	100
NBG	4hrs	92.9	82.3	73.9	81.25
DAT	24hrs	100	100	100	97.22

# Weekly Rota: *What is the impact?*

Weekly Rota- CORE DAY	Expected	Mon		Tue		Wed		Thu		Fri	
Senior BMSs: Supervising / Training	2		Senior	Senior	Senior					Locum	Locum
Cross-match Bench BMS	1	Senior/ BMS-A	BMS-B	BMS-B	BMS-B	Senior	Senior	Senior	Senior	BMS-B	BMS-B
Automation ( MLA / Trainee)	1	MLA	MLA	MLA	MLA	MLA	MLA	MLA	MLA	MLA	MLA
Serology/ Authorising BMS	1	Locum	Locum	Locum	Locum	BMS-A	BMS-A	Locum	Locum	BMS-A	BMS-A
Reception, Stock Mgt (MLA)	1	MLA	MLA	MLA	MLA	MLA	MLA	MLA	MLA	MLA	MLA
<i>Staff in training</i>	N/A	BMS- A									
Blood Bank Manager	1										
Senior BMS : QMS	1									Senior	Senior
HTTA – Traceability, BBM and TP support ( Band 4)	1	HTTA	HTTA	HTTA	HTTA	HTTA	HTTA	HTTA	HTTA	HTTA	HTTA





# Capacity Plan: Communication & Monitoring

## *Your Governance Structures:*

- **Risk register**- *risks caused by inadequate staffing.*
- **Change control**
- *Annual review*
- Monthly quality reports to your line manager – escalation and oversight
- How does CEO ( Person Responsible (PR) for Management of the Hospital Blood Bank) know?
- *Document, document, document!!!*

## *Roles and Responsibilities*

# Capacity Planning



Right staffing levels



Right skill mix



Right knowledge



Right training



Right supervision & support



Right development



Right resources



Right culture

**Patient & Staff Safety**

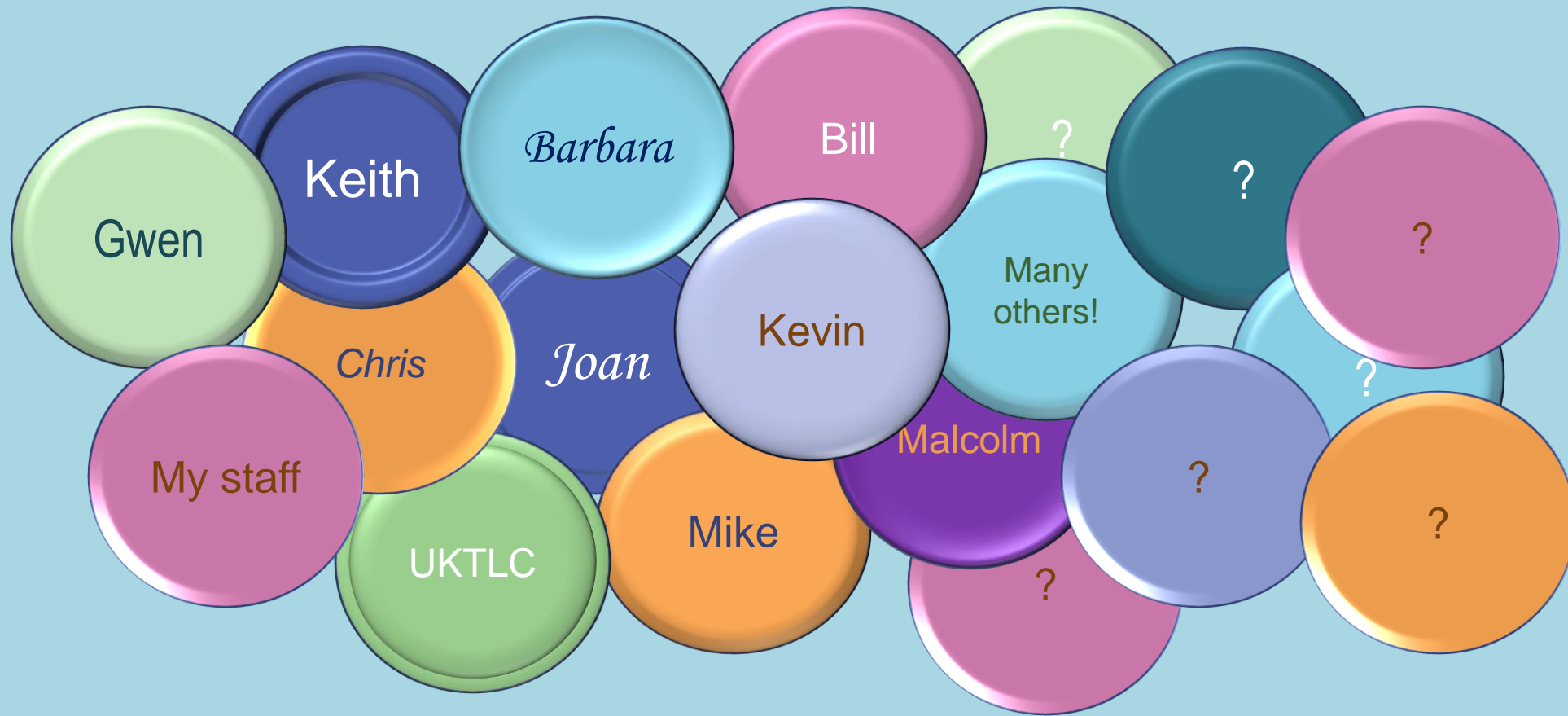


Human interaction is the key  
force in overcoming resistance  
and speeding change.

Atul Gawande

“ quote fancy

# Friends & Mentors



*With thanks for all the help and support over the years.*



**All anyone asks for is a  
chance to work with pride.**

W. Edwards Deming