

Out of Hours Crossmatching 2006 Audit

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Regional Transfusion Committee



SHOT 2005

- 42.5% of wrong blood incidents originated in the laboratory
- 22 errors in ABO typing
 - 9 sample selection
 - 10 transcription errors
- **59% of these occurred out of core hours**

Standards

- None!

Methods

- Organisational questionnaire
- Data collected on crossmatch episodes
 - 40 episodes/2 weeks-whichever reached first
 - Total numbers also collected for the 2 weeks
 - ‘out of hours’ defined by individual labs
 - Paper forms returned and entered by hand

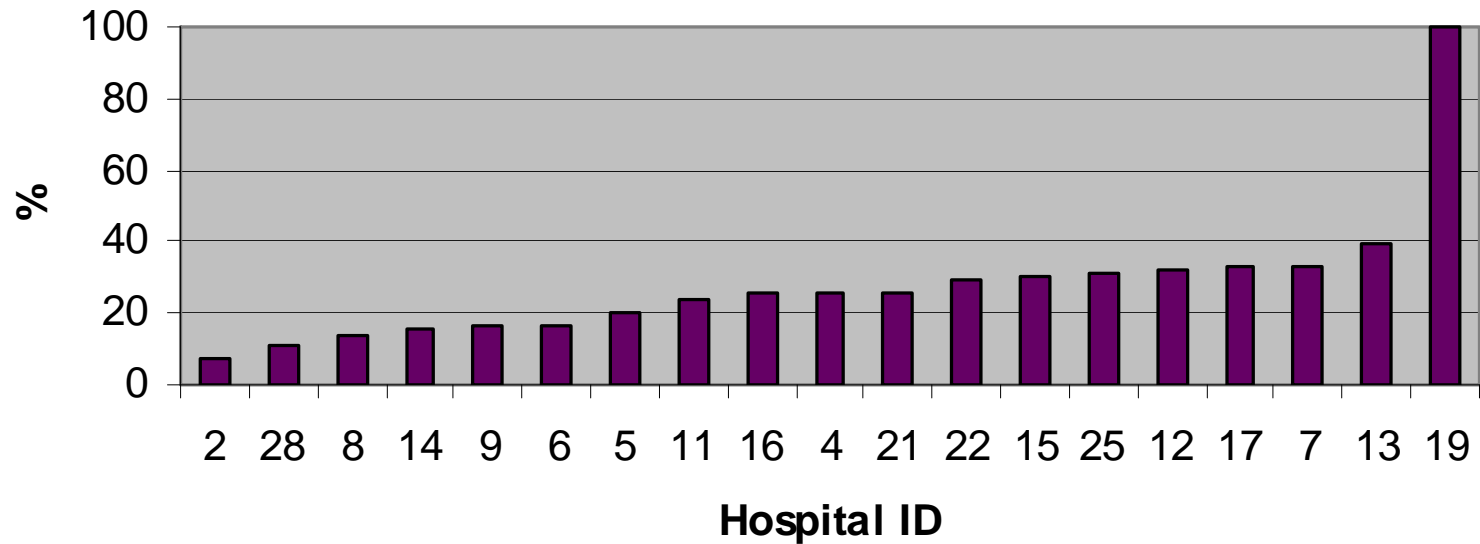
Participation

- 28 Blood banks agreed to take part
 - NHS and Private
- 19 returned data
 - Organisational and episode
 - 581 episodes audited

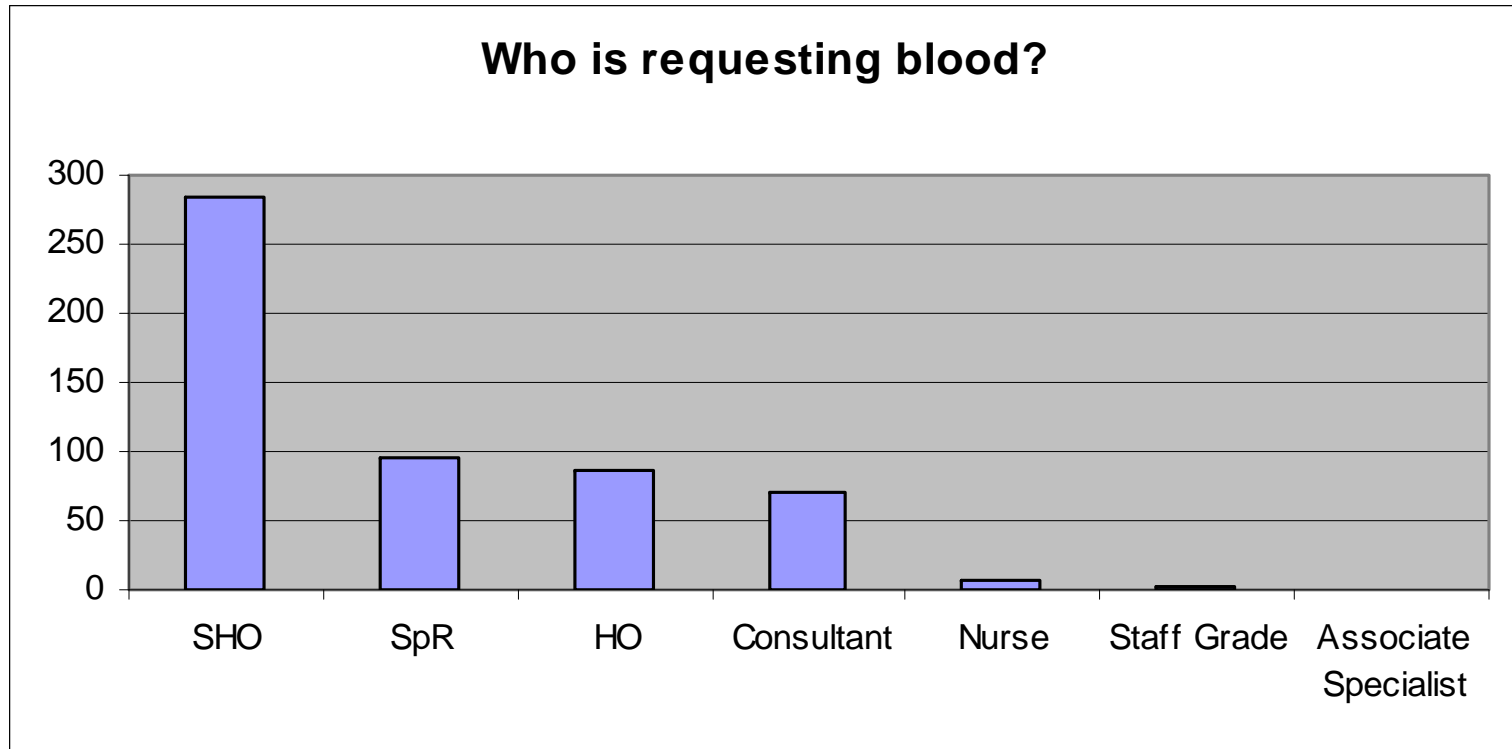
Results-Activity Levels

- Out of hours requests
 - Median 124 (1 to 782)
 - 27% were crossmatches
- Of all crossmatch requests
 - 29% received out of hours

Crossmatch requests during Audit Period occurring out of hours as percentage of total

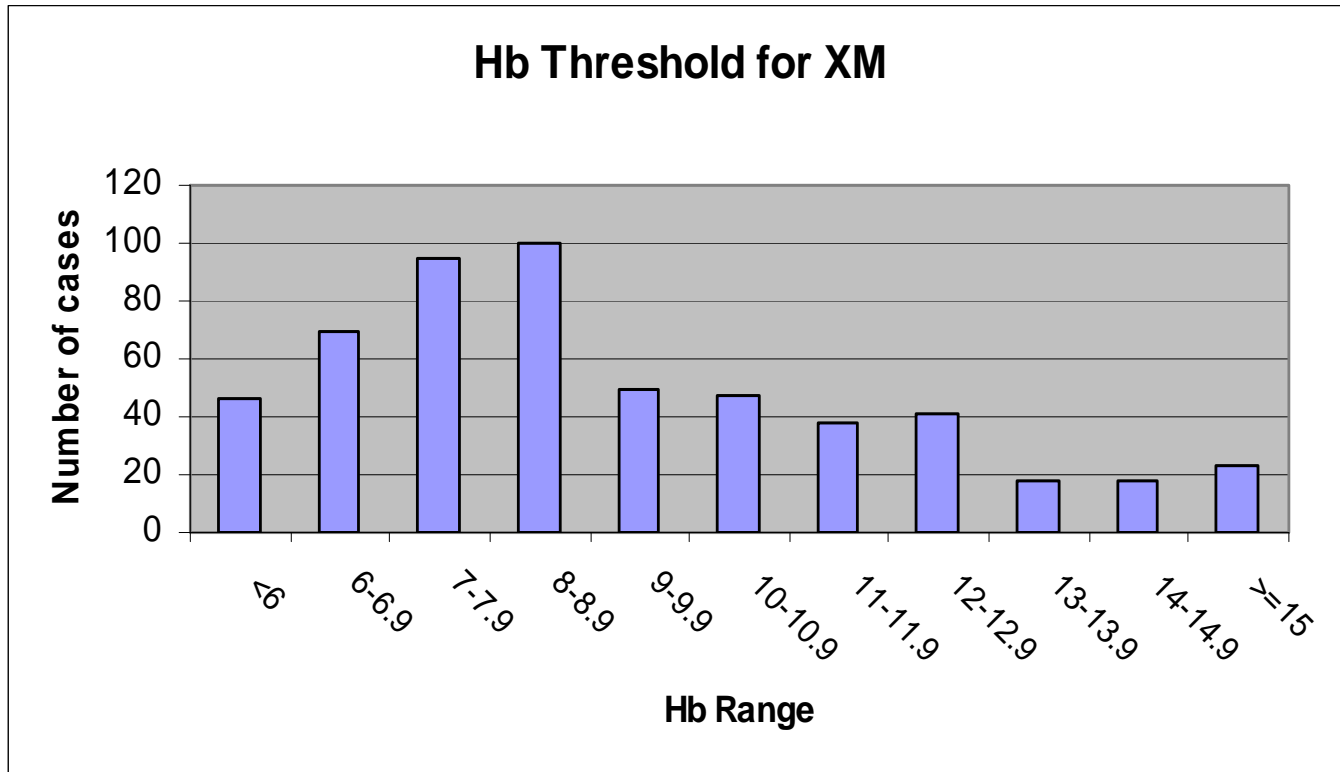


Who requests blood?



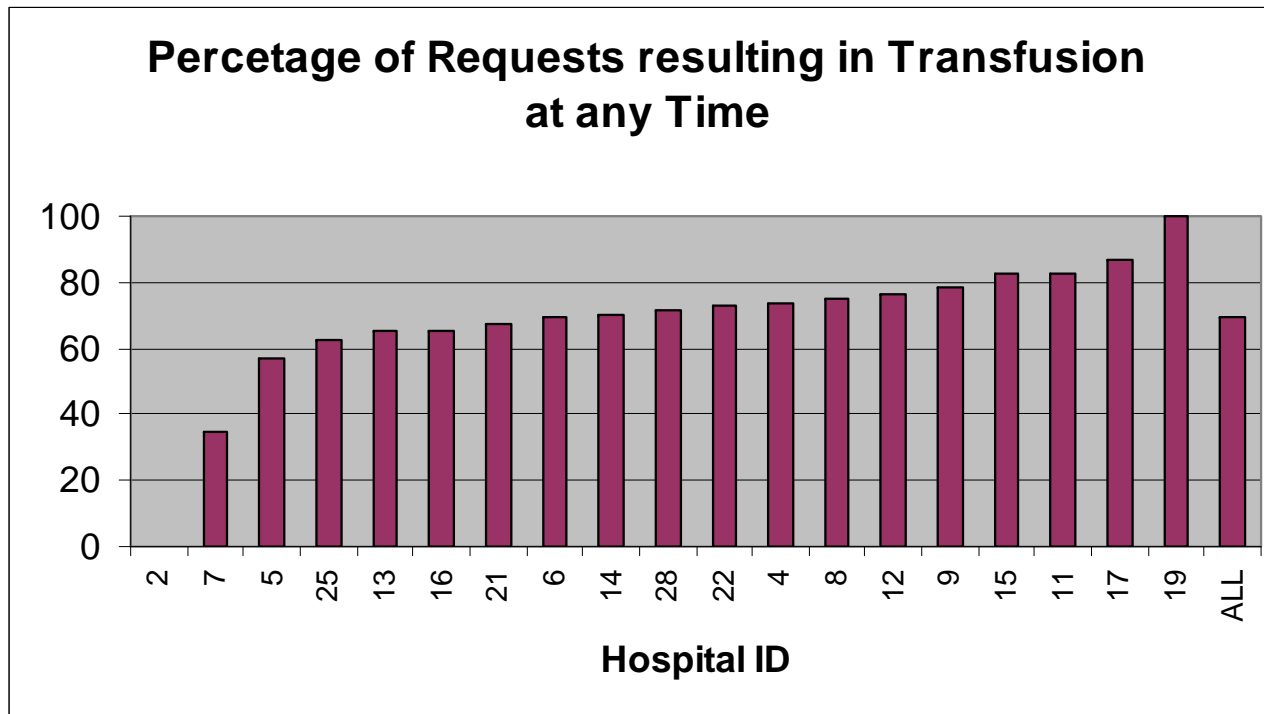
What's it for & is it appropriate?

- 47% could be considered as urgent or emergency
 - Acute blood loss/GI bleed/emergency surgery/acute trauma/emergency obs
- ‘Chronic anaemia’ most common indication
- >10% were for ‘elective surgery’



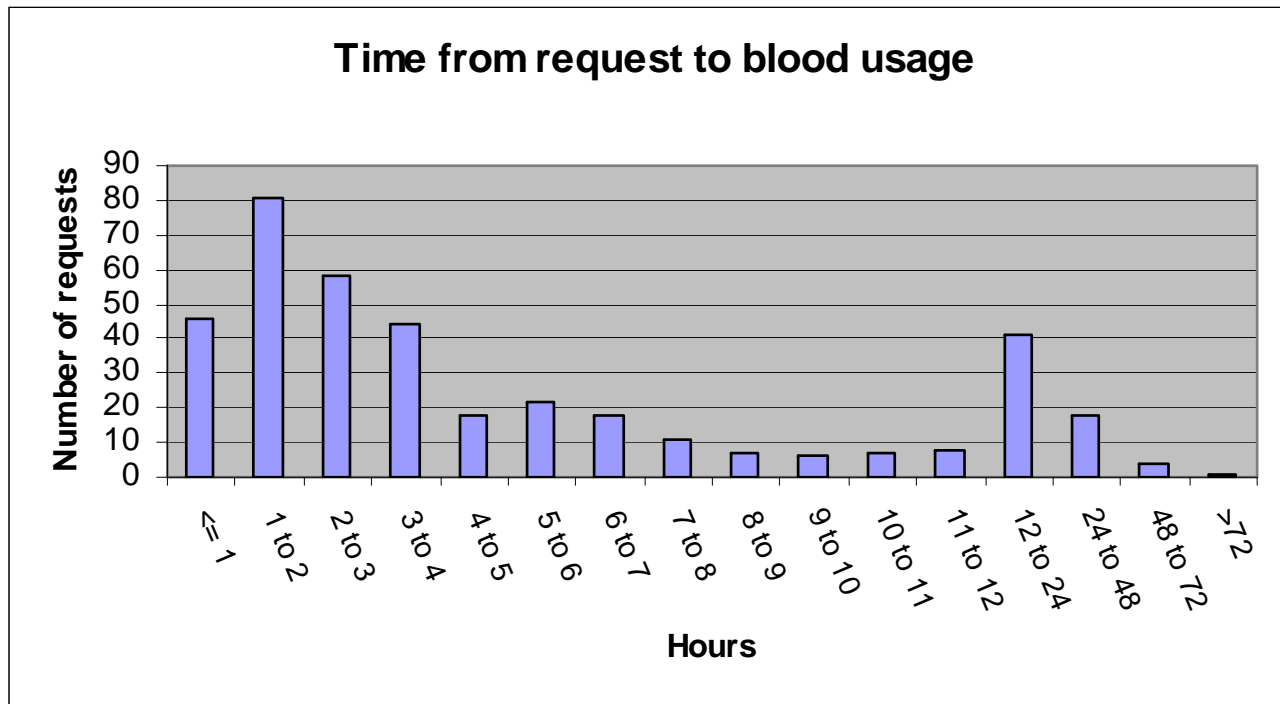
- 18% of requests > 12hrs after Hb result
- 10% of requests > 24hrs after Hb result

Was it used?



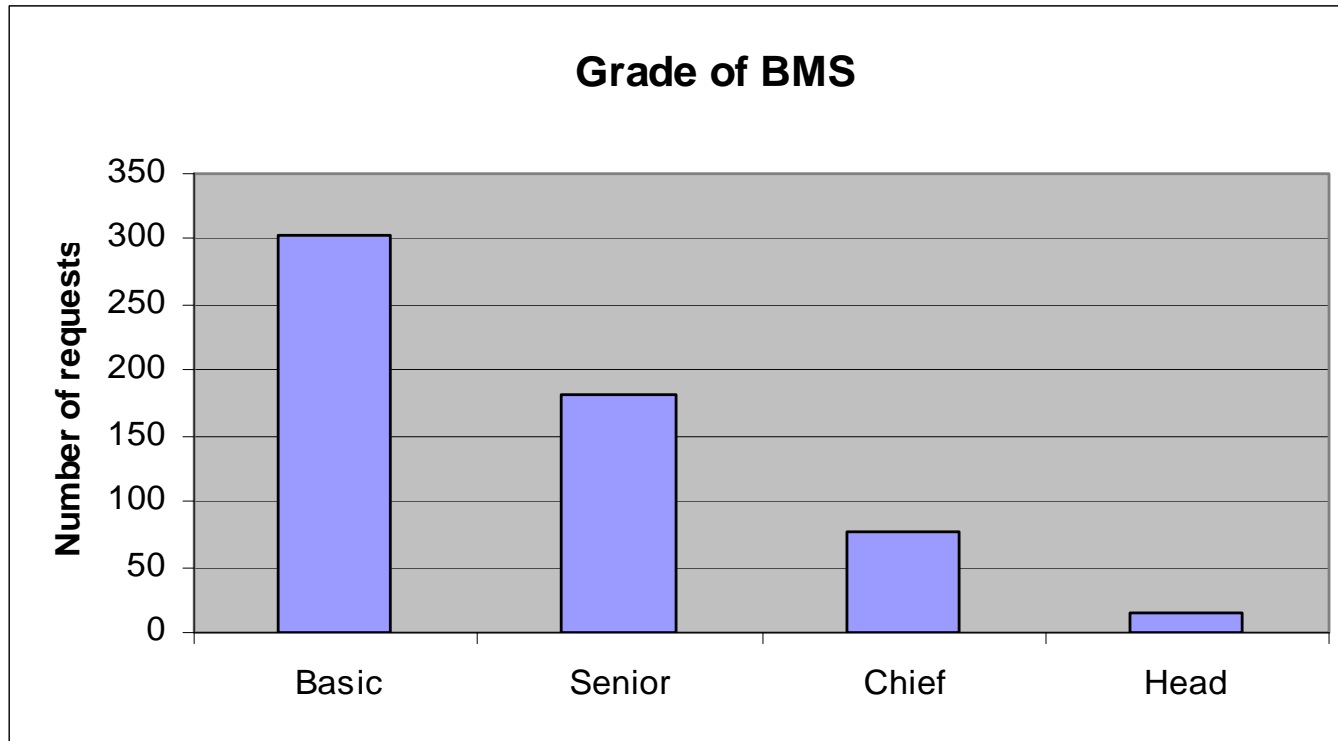
- Overall 72% of crossmatches resulted in transfusion

When was it used?

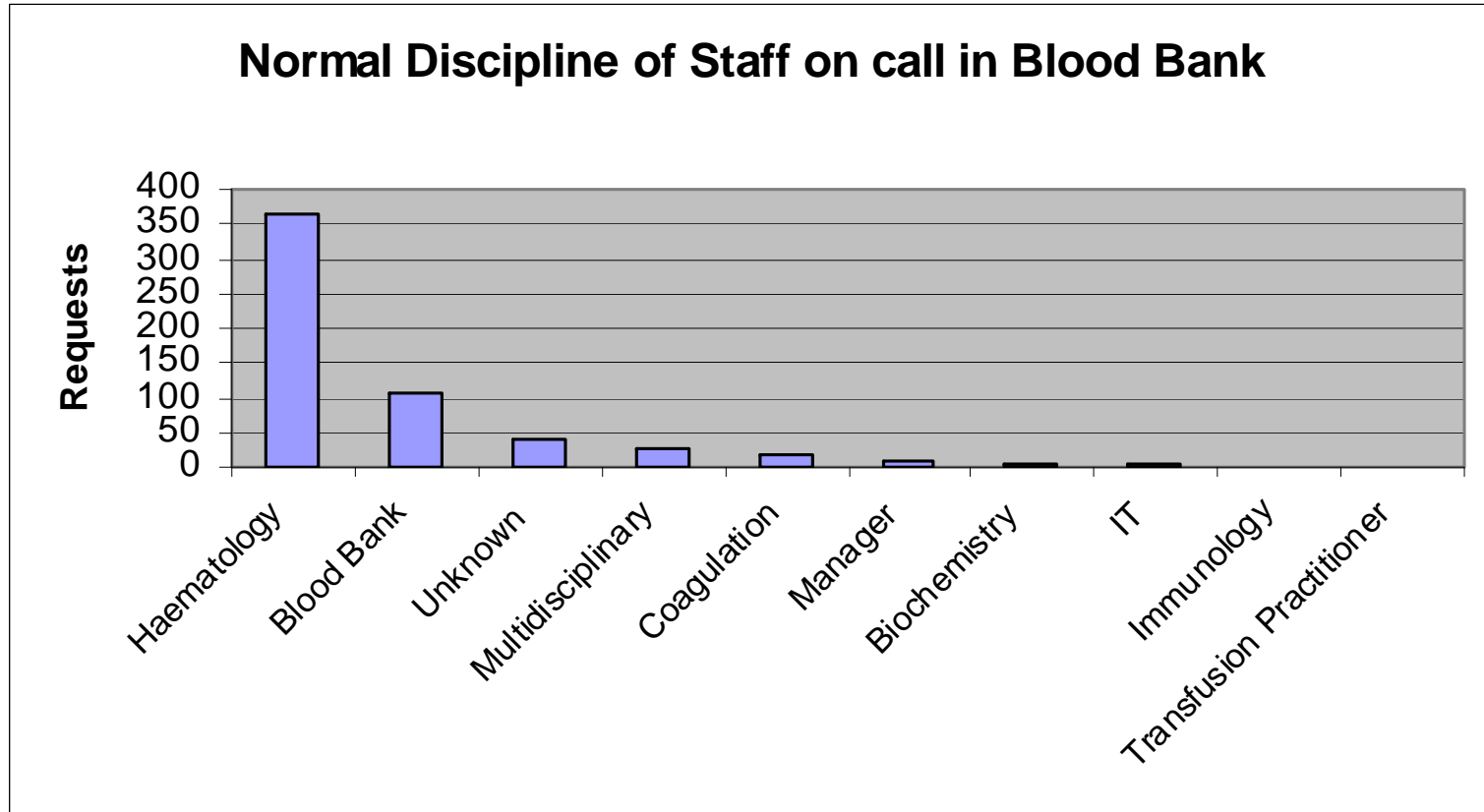


- 52% transfused during same ooh period

Who is doing the work?



Where are they from?



How much recent experience have they had?

Grade	Total	Permanent bb staff (%)	Rotating through blood bank in the last year (%)	No routine BB work, doing on call only (%)
Basic	304	24 (7.9%)	276 (91%)	4 (1.3%)
Senior	181	37 (20%)	88 (48.6%)	57 (31.5%)
Chief	77	32 (41.5%)	17 (22.1%)	28 (36.3%)
Head	14	0.0	1 (7.1%)	13 (92.8%)

- Overall 17.5% of requests dealt with by BMS with no routine BB experience in last year

Conclusions

- Junior doctors responsible for majority of requests
 - 52% could be considered non-urgent
 - 52% result in transfusion during same period
- There is a significant amount of ‘routine’ work being done
- Majority of work done by lone working basic grade BMS
 - with variable support/back-up
 - 17.5% have no recent experience in BB besides on call
 - In 18/19 the BMS covered other disciplines as well as BB
- Only 1/19 used manual methods ooh

Recommendations

- Work load should be limited to clinically urgent and justified situations
- Lone working BMS must have clear arrangements for support/backup
- The same methods should be used as during the day
- All on call staff should spend a minimum period of time in the BB during normal hours
- There is a need for regional or national guidelines for out of hours working in blood bank

Thank You

Report available on West Midlands RTC Website

www.transfusionguidelines.org.uk



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