

Developing a sustainable Histopathology service: Expanding the Biomedical Scientist role

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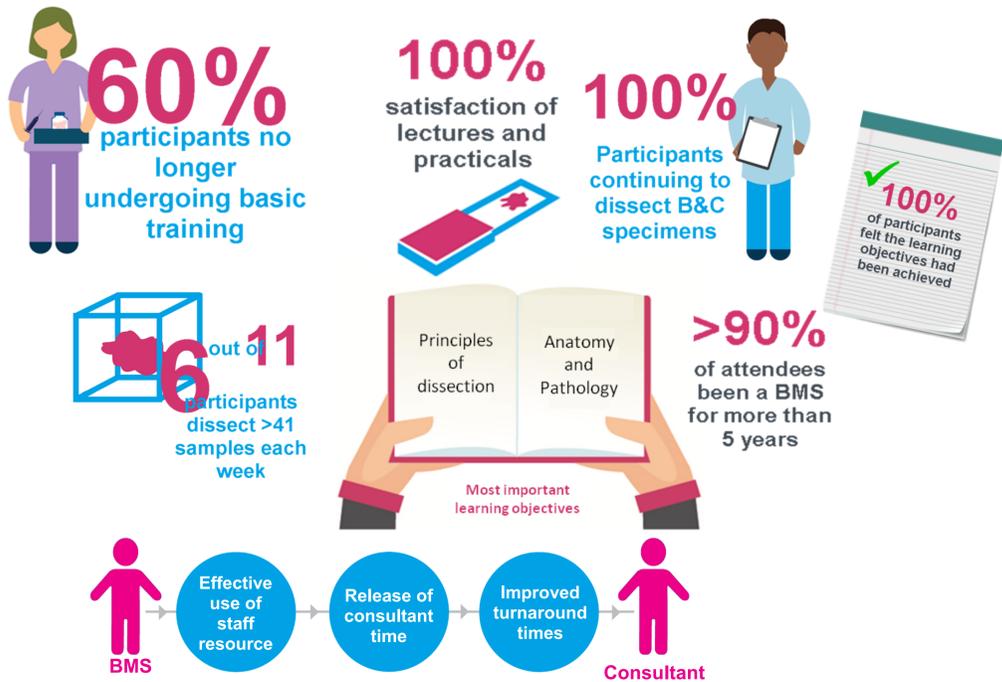
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Aims

Tissue dissection is routinely undertaken in Histopathology laboratories. Historically, this was undertaken by medical staff. However, demand on laboratories, combined with consultant staff shortages, has resulted in pressure in Pathology departments with meeting patient turnaround time targets.

In recent years, non-medical staff, such as Biomedical Scientists (BMS), have been trained to undertake tissue dissection of selected specimen types. Across Scotland, **21%** of dissection time commitment is undertaken by BMS.

SPAN's long term goal is to increase BMS dissection to enable medical time to be released from dissection to diagnostic reporting or other clinical work which will ultimately impact on patient turnaround times. This is a key deliverable in the Scottish Government's National Delivery Plan for Healthcare Science¹ – to develop sustainable services through workforce modernisation. The project will empower BMS to expand their clinical skills. This will facilitate the sustainability of the pathology service through maximising skills, knowledge and capacity.

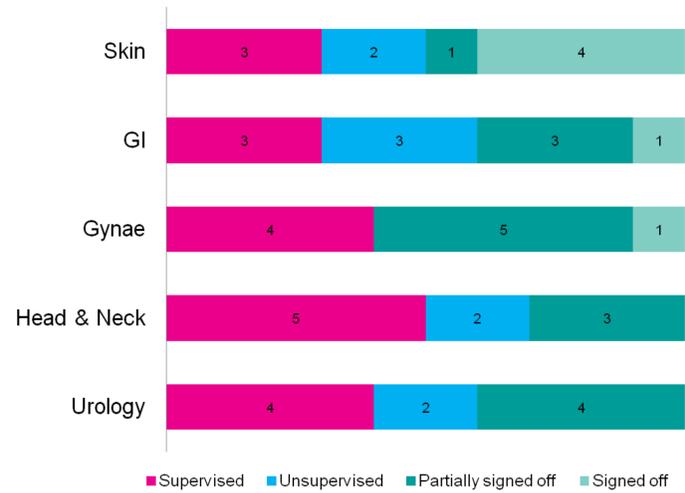


Outcomes / results

11 participants from all ten Pathology-providing Boards took part in the course, highlighting that they were "very satisfied" that the course had fulfilled its learning objectives.

One participant noted "The course gave me a good grounding in anatomy and pathologies of many of the specimens I am likely to come across in BMS dissection."

Participants are now undergoing dissection training locally, and are now approved to carry out a range of tissue types:



Successful completion of local practical training, over two years and supervised by medical colleagues, will reduce medical time in dissection.

SPAN's long term goal is to increase BMS dissection to 90% for B&C specimens (less complex) and 70% for D&E specimens². Individual NHS Boards can expect significant impact, where the current rate can be as low as **2%**.

Methods

The Scottish Pathology Network (SPAN) developed a week-long national training school programme to provide the theory and a practical overview of all the main Histopathology tissue specialities. It intended to equip participants with a strong basis from which to continue their dissection training locally.

This included the development of a number of learning objectives and the opportunity for candidates to observe and gain practical exposure to the dissection of tissues relevant to the specialties discussed in the course.

The following stages of training are planned:

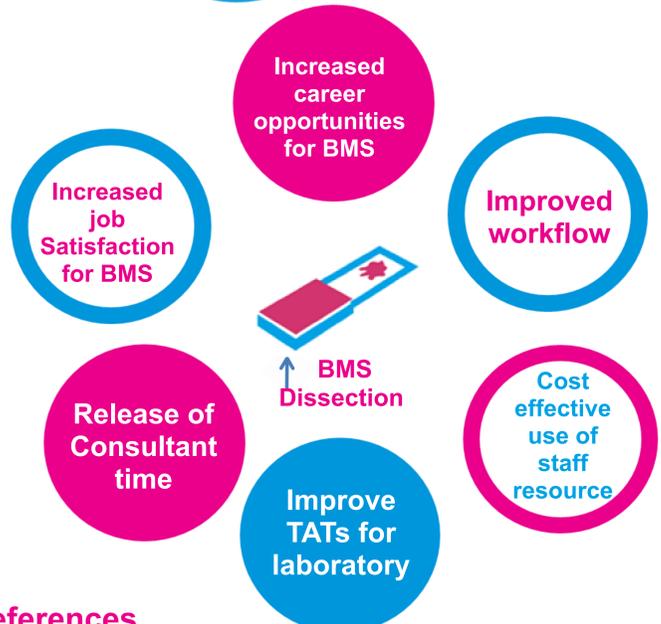
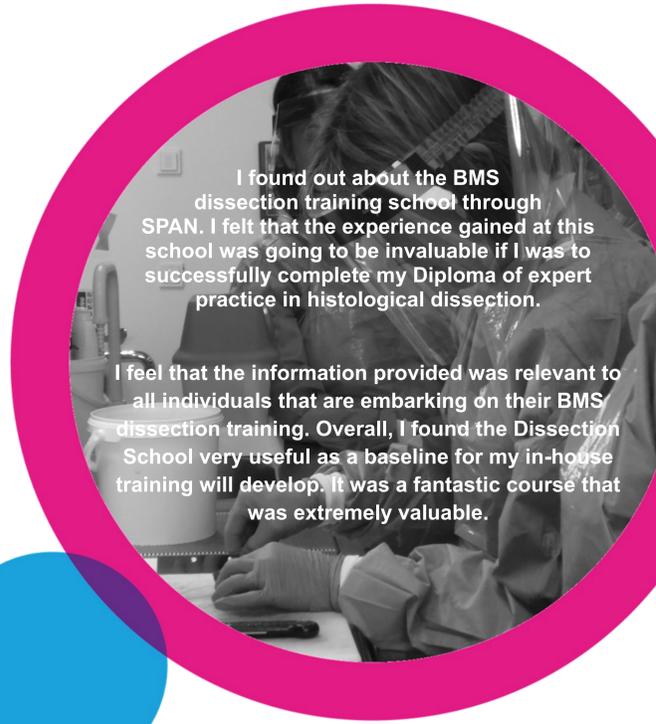
Phase 1: National Training School implemented educational framework in NHS Greater Glasgow & Clyde

Phase 2: Practical dissection training at local departments

Phase 3: Transfer of further tissue dissection to BMS

I have worked as a Biomedical Scientist (BMS) in cellular pathology for over 10 years and have completed both of the IBMS portfolios, competency and specialist. The most common progressive route for a BMS who has completed these portfolios is to go on to complete an MSc in Biomedical science. This paves the way for individuals to go down the route of management.

This route does not appeal to some BMS's like me who find the more clinical/scientific aspects of cellular pathology more appealing. It was therefore more important to me to extend my role as a BMS. I had always felt the Diploma of expert practice in histological dissection to be of interest to myself and always had this in my personal development plan. I could also see how this new set of skills and knowledge could benefit my department. By increasing the amount of specimens dissected by BMS's this would in turn free up medical staff for reporting cases and the associated direct clinical care work.



References

- Driving Improvement, Delivering Results: The Scottish Healthcare Science National Delivery Plan 2015–2020 <https://www2.gov.scot/Resource/0047/00476785.pdf>
- Derek C Allen, R. Iain Cameron, Royal College of Pathologists guidelines as cited in Histopathology Specimens: Clinical, Pathological and Laboratory Aspects, 2nd Edition, 2013