
Downloaded from: http://insight.cumbria.ac.uk/id/eprint/3246/

Usage of any items from the University of Cumbria’s institutional repository ‘Insight’ must conform to the following fair usage guidelines.

Any item and its associated metadata held in the University of Cumbria’s institutional repository Insight (unless stated otherwise on the metadata record) may be copied, displayed or performed, and stored in line with the JISC fair dealing guidelines (available here) for educational and not-for-profit activities provided that

- the authors, title and full bibliographic details of the item are cited clearly when any part of the work is referred to verbally or in the written form
- a hyperlink/URL to the original Insight record of that item is included in any citations of the work
- the content is not changed in any way
- all files required for usage of the item are kept together with the main item file.

You may not

- sell any part of an item
- refer to any part of an item without citation
- amend any item or contextualise it in a way that will impugn the creator’s reputation
- remove or alter the copyright statement on an item.

The full policy can be found here. Alternatively contact the University of Cumbria Repository Editor by emailing insight@cumbria.ac.uk.
The introduction of a fetal ultrasound telemedicine service: Quality outcomes and family costs

Snaith, Vikki J., Lie, Mabel, Marshall, Alison, Bidmead, Elaine, Robson, Stephen C.

Introduction: The complexity of fetal medicine (FM) referrals that can be managed in a district general hospital (DGH) is dependent on the availability of specialist ultrasound expertise. Telemedicine can effectively transfer real-time ultrasound images via videoconferencing. We report the successful introduction of a fetal ultrasound telemedicine service.

Methods: All women referred for FM consultation from the linked DGH were seen via a weekly telemedicine service, excluding cases where invasive testing was anticipated. Image and audio quality were rated (using a 5 point scale) following each consultation. Women referred for their first appointment were asked to complete a questionnaire following the consultation. Figures presented are median [range].

Results: 80 women had a telemedicine consultation between October 2015 and September 2016. 37 cases were new referrals because of fetal anomaly (n = 17), exclusion of abnormal placental invasion (n = 11), small-for-gestational-age (n = 7) and prior history of fetal anomaly (n = 2) and 43 cases were follow-up consultations. Median gestation was 29 [13–36] weeks. Image quality was of sufficient quality to achieve the aims of the consultation in 79 cases with an image score of 4 [3–5] and audio score of 5 [3–5]. Journey to the telemedicine consultation was 20 [4–150] minutes in comparison to an estimated journey time of 238 [120–450] minutes to the FM centre. Estimated family costs for attendance at the FM centre were £95 [20–555].

Conclusion: We have demonstrated that a fetal ultrasound telemedicine service can be successfully introduced and used to provide high quality consultations.