

Swine Flu Clinical Critical Care ECMO Sub Group

4th November 2009

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1. Modelling paper

MH spoke to his paper previously circulated. Explained in context that we might be close to (or at) the peak of the 2nd wave. Using data from the first wave to inform anticipate scenarios. Key points:

- Actual ECMO demand to date seems to sit within the boundaries of the anticipated lower scenario
- Some further need for ECMO provision would not be surprising but very large increases unlikely
- If there is a need for an increase in ECMO provision in the 2nd wave it is likely to be in the very near future; that is in the next 2 or 3 weeks
- Critical Care demand proved to be at the lower end of the predicted range and so far surge plans for capacity of level 3 care have not needed to be activated.

But also important to take into account:

- No guarantee actual epidemic will peak when the model predicts
- Slightly slower than predicted increase in hospitalisations (and hence ECMO) will probably be mirrored by a decline that is slower than predicted
- Small numbers of ECMO patients in real terms mean that any increase in need will give a disproportionately large percentage rise in requirement.
- We may be looking at further peaks over the winter
- This analysis is all at an aggregate national level

2. National picture

It was discussed that the expanded ECMO capacity now available – adult:

Glenfield 8

In addition since the group recommended doubling ECMO capacity to 10 beds at Glenfield the following additional 4 adult beds have been commissioned as below

Brompton 2

Papworth 2

This provides a current maximum capacity for adults of 12 beds .

Note; these beds are regarded as a UK resource

In addition, there are beds available in

Sweden 2 as part of a longstanding reciprocal arrangement

There are Paediatric & Neonatal facilities available at:

GOSH	3 (3 neonatal)
Glasgow	4 (2 paediatric and 2 neonatal)
Freeman	2 (2 paediatric)

Note; these beds are regarded as a UK resource

In discussion, it was noted:

In the first wave, the total length of stay in Glenfield (including post ECMO care) was 18.6 days. The length of stay is different in the second wave and likely to be longer.

MA-K made the point that the NCG contract was to treat 100 patients in the year (doubled from 50).

DH has talked about “doubling of capacity” for ECMO services alongside the doubling of capacity for critical care.

JH stated we agreed that Glenfield should hold the gold standard. RF confirmed that Glenfield was performing the ‘gate-keeping’ role for Brompton and Papworth, including advice on pre-ECMO optimisation and triage. In addition, both hospitals had been offered training opportunities. RF and GF confirmed that staff in Aberdeen had been “accredited” through the Glenfield training process.

MA-K reported that Brompton and Papworth had been taken through a quality assurance process prior to commissioning to ensure they met the ‘Gold Standard’ identified at Glenfield. This had involved Peer Review and clinical input. The draft framework for the provision of ECMO was presented by representatives from Glenfield. This will be more widely distributed once it is in final format.

JH asked that the group should keep in mind that once in place it would be difficult to stand down ECMO provision in a unit.

MA-K reported NCG will be looking at expansion for ECMO for non H1N1 later in the year and into 2010. Some of this expansion would not be on-line until 2011

PL stated it might be possible to increase capacity at the Brompton using ECMO experienced paediatric staff to expand adult provision. MA-K would explore

3. Sustainability

Glenfield – working with NCG – are looking at sustainability in terms of staffing. Understand that running 8 beds + 3 post ECMO beds is very hard work.

It was also appreciated that to continue the advice and support to other units and to maintain the ramped up clinical service at Glenfield would be demanding.

Glenfield also have done the transport for Brompton and Papworth. A way round this would be to look at the transport issues transferring to other centres to relieve pressure on Glenfield and the E.Midlands SHA.

Might need a statement by Bruce Keogh and Ian Dalton to state that transport (return) of patients should be undertaken by SHAs sending patients to Glenfield.

Glenfield has reduced capacity in elective surgery to be able to accommodate 8 beds. Any increase beyond this would further affect ability to undertake essential emergency work.

4. Clinical Advice

JH stressed that she would advise the larger critical care group that critical care practice notes for H1N1 will be updated to ensure clinicians had the best possible advice available in terms of referrals concerning ECMO

5. International perspective

There are 2 beds currently available in Sweden. There is a good deal of activity in USA currently, but little other provision in the EU.

KD raised the question as to whether beds in Sweden should be used or whether there should be step up in the UK. We would use capacity in UK first, but accept that there are reciprocal arrangements in place with Sweden. We would need to consider Ministers and CMO's advice on whether we would consider requests from other countries (outside the Sweden reciprocal arrangement).

6. Communications Strategy

JH indicated that points made today would need to be agreed by all those at the meeting before onward communication. Until that time the details of the discussion for limited circulation only

Conclusions in summary

General

- the provision of ECMO beds should be a UK resource as are the other nationally commissioned resources
- the provision of ECMO should not be a “free for all” for any units who wished to provide it
- All ECMO must be provided to the Glenfield ‘Gold Standard’

Immediate

- Any increase in provision in the current wave needs to be rapid (2-3 weeks)
- This is too short a timescale to consider new respiratory ECMO centres
- Therefore only those units already providing adult ECMO (Glenfield, Brompton, Papworth) should be considered for expansion
- The NCG will consult with Brompton and Papworth about possible increase in beds
- Glenfield should be supported at the current 8 active ECMO bed level in order that they are able to maintain their central gate-keeping, advice and training role
- There is no demonstrated need in the current wave for increased paediatric provision
- The load (transport, staff support, dispersing other clinical load) should be spread beyond E.Mid. SHA

Medium Term

- Geographical spread should be considered in the commissioning of additional ECMO centres to minimise transport burden
- Only those centres already providing ECMO, cardiac or ‘bridge to transplant’ should be considered
- From a commissioning perspective – Birmingham, Manchester and Newcastle could be considered for providing ECMO. They would need to be (a) prepared to offer ECMO and (b) able to do it, which would include staffing capacity and impact on other resources, and (c) undergo the quality assurance process previously described using Glenfield gold standard. There might be training requirements
- for Scotland, a similar approach (using the framework and quality assurance) should be applied. Ministers and NSD Scotland to be consulted and agreement sought

Longer Term (and probably beyond H1N1)

- NCG will consider bids from others using quality assurance process described above
- This is beyond the remit of the current group

Thursday media briefing
ICS website
SHA Flu Directors
SFCCCG

With a more detailed statement by 12th November.

Summary

The group recognised that the current expanded ECMO capacity now available for adults was:

Glenfield	8
Brompton	2
Papworth	2

This would leave a maximum capacity for adults currently at 12 beds.

In addition, there are beds available in

Sweden	2
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There are Paediatric & Neonatal facilities available at:

GOSH	3 (3 neonatal)
Glasgow	4 (2 paediatric and 2 neonatal)
Freeman	2 (2 paediatric)

Key points the group recommended that:

- now was the time to increase adult capacity in place and be ready as soon as possible
- the provision of ECMO should not be a “free for all” for any units who wished to provide it
- any expansion must be in units which have current expertise in using ECMO (cardiac ECMO or a bridge to transplant) and would not be looking at units that currently not providing ECMO
- the provision of ECMO beds should be a UK resource as are the other nationally commissioned resources
- there should be a better geographical spread (if possible) not to overburden the transport arrangements
- to look at any additional capacity that might be available at Papworth and RBHT (above their current capacity of 2 beds each)
- there was no current requirement to increase capacity at paediatric ECMO level