

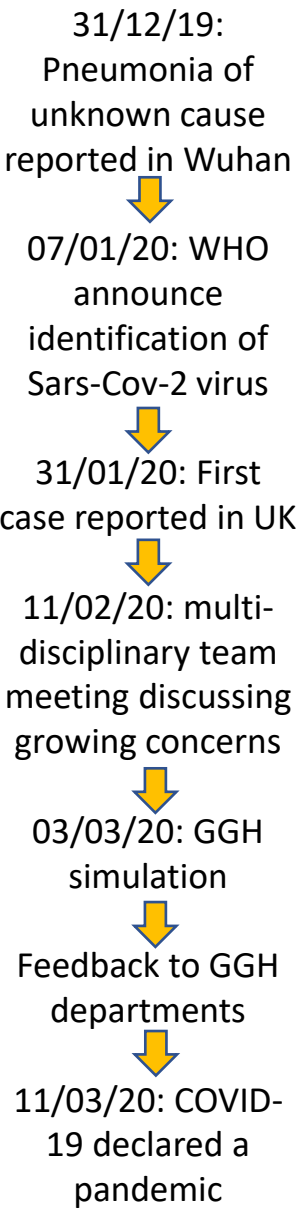
Inter-departmental, multidisciplinary COVID-19 patient simulation exercise



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Timeline



Background:

On the 31st January 2020 Wuhan, China reported a cluster of cases of COVID-19. (1) Discussions with colleagues from medicine, intensive care (ICU) and emergency departments (ED), revealed growing concerns regarding the COVID-19 outbreak and the potential implications for Glangwili General Hospital (GGH), a district general hospital in West Wales.

To address these concerns a COVID-19 patient simulation scenario was organised, to be run across the ED, medial and ICU departments. It was important that this was a multidisciplinary approach to ensure all aspects of care for a patient and how they impact each other, were fully considered.

Objectives:

1. Assess the COVID-19 policies currently in place.
2. Assess staff awareness of policies
3. Identify areas for improvement across all departments and disciplines

Method:

- A simulation scenario was designed, involving an unwell patient with risk factors for and clinical features of COVID-19.
- Simulation began in the ED and involved clerical, nursing, radiology and medical staff, amongst others.
- The simulation included the patient deteriorating acutely and requiring a 'Medical Emergency Team' call.
- The simulation was run as per real time and included transferring the patient to the ICU.
- The simulation was observed by members of each department and filmed, allowing further departmental review.
- Formal written feedback from participants was collected.
- Feedback and learning points were analysed and disseminated to each department separately and presented at the hospital grand round.

Results: Feedback highlighted common themes, including;

1. No standardised personal protective equipment (PPE).
2. Unnecessary numbers of staff exposed.
3. Difficulties in communication between staff in COVID-19 exposed 'dirty' and non-exposed 'clean' areas.
4. Uncertainty regarding how best to safely facilitate investigations, such as chest x-rays and blood gas samples.

Conclusion:

- The simulation was felt to be a useful exercise by all involved and numerous areas for development were identified, resulting in changes to the ED, medical and ICU departments.
- The exercise increased staff awareness of current policies and generated discussions for further developments moving forwards.
- Policies written for ED, medical and ICU departments, put into place and reviewed as COVID-19 pandemic evolved.
- Regular updates on changes to policies disseminated to allied healthcare professionals via multi-media tools and regular meetings.
- Training on managing acutely unwell COVID-19 patients run by inter-departmental group.

References:

1. World Health Organisation (2020) *WHO Timeline COVID-19* [Online]. Available at: <https://www.who.int/news-room/detail/27-04-2020-who-timeline---covid-19>
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3. American Society of Microbiology, (2020), *Novel Coronavirus (COVID-19)* [Online]. Available at: <https://asm.org/Press-Releases/2020/COVID-19-Resources>