

## PP56 The Use of Computed Tomography for Detecting COVID-19 Pneumonia: Rapid Evidence Review

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**Introduction.** The reverse transcription polymerase chain reaction (RT-PCR) test is the gold standard for detecting coronavirus disease 2019 (COVID-19), but recent studies have reported false negative results for RT-PCR. Consequently, several countries are looking at chest computed tomography (CT) for the diagnostic workup of patients with suspected or probable COVID-19 to inform clinical management. Therefore, this rapid review provides the best available evidence on the use of chest CT for detecting COVID-19 pneumonia.

**Methods.** Literature searches were conducted in the PubMed, Cochrane Library, JBI Library, Epistemonikos, and Evidence Aid databases for relevant papers published from 1 December 2019 to 12 June 2020. The search strategy was based on the identified population, concept, and context with respect to the objective of the review. The methodological quality of the seven systematic reviews identified was appraised using the AMSTAR checklist.

**Results.** The use of CT as a first-line screening tool for COVID-19 is not beneficial. Nevertheless, for patients with suspected COVID-19 pneumonia who had a false-negative RT-PCR results, cross-checking with CT and a repeated RT-PCR test is essential to avoid misdiagnosis. Chest CT offered high sensitivity for detecting COVID-19 pneumonia among symptomatic individuals, especially in those with severe disease. It was also useful for evaluating the potential complications, disease severity, and progression of COVID-19 pneumonia. The features of CT images differed at the early, intermediate, and late stages of COVID-19 pneumonia, but the most common imaging findings were patchy and ground glass opacities. It was also found that diagnosing COVID-19 in children using CT is challenging.

**Conclusions.** Even though chest CT is not useful for primary screening of COVID-19, it is useful for detecting later stage disease and for evaluating patients with COVID-19 pneumonia. For patients with suspected COVID-19 pneumonia and a false negative RT-PCR result, cross-checking with a chest CT and a repeat RT-PCR test is essential to avoid misdiagnosis.

## PP57 Collaborating In Times Of COVID: The Launch Of The National Wales COVID-19 Evidence Centre

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**Introduction.** The COVID-19 pandemic has had a dramatic impact on the health and social care landscape, both in terms of service provision and citizen need. Responsive, evidence-based research is essential to develop and implement appropriate policies and practices that manage both the pandemic itself, and the impact COVID-19 has on other health and social care issues.

To address this, the Wales COVID-19 Evidence Centre (WCEC) was launched in 2021 with the aim of providing the best available, up-to-date, and relevant evidence to inform health and care decision making across Wales.

**Methods.** Funded by the Welsh Government, the WCEC comprises of a core team and several collaborating partner organizations, including Health Technology Wales, Wales Centre for Evidence-Based Care, Specialist Unit for Review Evidence Centre, SAIL Data-bank, Public Health Wales, Bangor Institute for Health & Medical Research in conjunction with Health and Care Economics Cymru, and the Public Health Wales Observatory. Over the last year, WCEC has developed its rapid review processes and methodology informed by best international practice and aims to provide around 50 reviews each year. WCEC works alongside various stakeholder groups from health and social care across Wales, and they form an integral part of the review process, from scoping to knowledge mobilization.

**Results.** To date, the WCEC has produced reviews on a diverse range of COVID-19 topics, including transmission, vaccination uptake (barriers, facilitators and interventions), mental health and wellbeing, as well as face coverings and other preventative interventions. The topics have also covered a wide range of populations, from general public, to healthcare workers, to children. These reviews have been used to inform policy and decision-making, including the Welsh Government's Chief Medical Officer 21-day COVID-19 reviews.

**Conclusions.** The WCEC has brought together multiple specialist centers with a diverse range of skills to produce timely reviews of the most up-to-date research to support decision makers across health and social care. These reviews have informed policy and decision-making across Wales.