CASE STUDY: A DEEP DIVE INTO MORTALITY

COLLABORATIVE WORK WITH AN ACUTE TRUST

Context: Aqua's Quarterly Mortality Report (QMR) helps providers interpret their mortality data. It includes the Summary Hospital Mortality Indicator (SHMI), risk-adjusted to account for factors such as age and comorbidity. Reviewing their mortality, a northwest trust noted they were an outlier. They contacted Aqua to help investigate.

What We Did: We set up a meeting in June 2023, including the trust's Medical Director and representation from business intelligence and clinical coding. The trust shared previous comparative work with their SHMI peer group (trusts similar in size and demographics). We updated this and found the trust to still be an outlier. We looked at clinical coding quality, specifically the proportion of patients with "signs and symptoms" coding, where a generic code has been used in the absence of precise diagnostic information. Where this proportion is high, mortality information is unreliable. We found the trust's rate to be in the lower quartile nationally, meaning coding quality did not offer a ready explanation for the trust's outlier position. Another hypothesis was that the trust's relatively small number of beds made their data senstive and gave deaths more statistical impact. A SHMI funnel plot with upper and lower dispersal limits indicating statistical significance which account for population size, showed the trust to still be an outlier. Finally, we looked at specific condtions. The trust had previously identified pneumonia as a potential concern and our updated analysis found it to still be an outlying condition. Further investigation uncovered gaps in the trust's nationally reported SHMI data for the pneumonia diagnostic group which were not in Secondary Uses Service (SuS) data. This suggested that the trust's SHMI pneumonia may not be accurate and that there may be similar issues with other conditions.

Impact: We agreed an initial focus on pneumonia. As well as being a high-impact condition, addressing the gaps in data highlighted here would likely surface any wider issues. We agreed the trust would join the Advancing Quality (AQ) programme for pneumonia, whose focus on data quality and unwarranted clinical variation with bespoke improvement support would provide key support. Work is ongoing.

Safe Care

aqua
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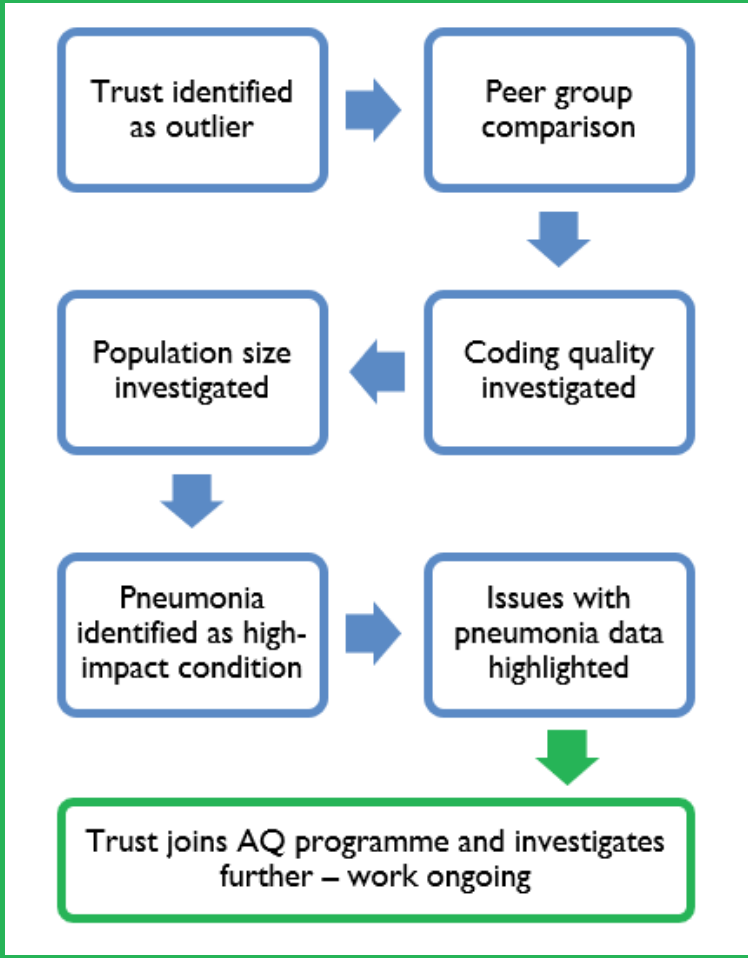

For further details about this piece of work, or to discuss how we can support you, please get in touch:

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April 2024