

## PROBLEM

Transmissions in healthcare systems can go undetected due to lack of discernment in current bacterial identification methods, putting patient and healthcare workers at risk.

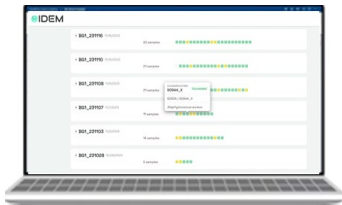
Whole Genome Sequencing (WGS) allows discrimination between strains which until recently has not been possible both at scale and at high resolution, preventing its routine use.

## SOLUTION

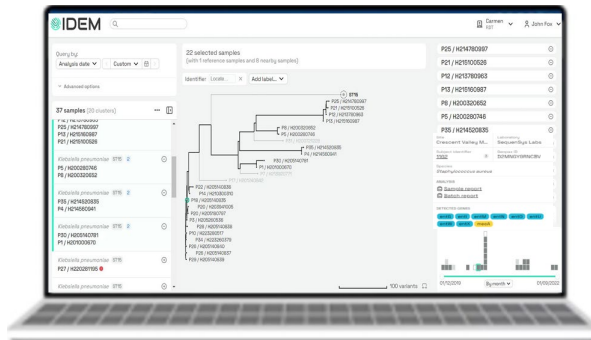
IDEM provides advanced, high definition, natural reference-free analysis of WGS data from bacterial pathogens, with easy-to-interpret results delivered in real clinical time to the clinical teams enabling prompt Infection Prevention interventions.

## IPC

### Laboratory



Automated QC for all isolates



User-friendly, continuously updated, and interactive display of relationships between samples

### Reporting



Summary information for IPC/clinical teams and patient records

## BENEFITS

- **No** specialist bioinformatics required
- **Identifies** previously undetected transmission events
- **Rules out** suspected connections
- **Enables detection of** transmissions originating in other settings



**Use existing samples:** All priority HAI pathogens are selected following routine culture and prepped for WGS



**Sequencing:** Compatible with Illumina platforms, we can provide guidance on the most cost-effective protocols across your hospitals and healthcare environments



**Monitoring:** Continuous detection of potential outbreaks and transmission events.

**422** infections avoided per year\*

**£2.7M** savings per year\*

\* Based on proactive use in 800 bed hospital in England.

## SPECIES COVERED

Our prioritized species address the most common Healthcare Associated Infections and Food Safety Species.

Species Name	
<i>Acinetobacter baumannii</i>	HD
<i>Campylobacter coli</i>	HD
<i>Campylobacter jejuni</i>	HD
<i>Campylobacter lari</i>	HD
<i>Citrobacter freundii</i>	SD
<i>Clostridiodes difficile</i>	HD
<i>Corynebacterium diphtheria</i> complex	SD
<i>Cronobacter sakazakii</i>	SD
<b>Enterobacter cloacae complex:</b> <ul style="list-style-type: none"> <li>• <i>Enterobacter asburiae</i></li> <li>• <i>Enterobacter cloacae</i></li> <li>• <i>Enterobacter hormaechei</i></li> <li>• <i>Enterobacter kobei</i></li> <li>• <i>Enterobacter ludwigii</i></li> <li>• <i>Enterobacter roggenkampii</i></li> </ul>	HD
<i>Enterococcus faecalis</i>	HD
<i>Enterococcus faecium</i>	HD
<i>Escherichia coli</i>	SD
<i>Haemophilus influenzae</i>	SD
<i>Klebsiella aerogenes</i>	HD
<i>Klebsiella oxytoca</i>	HD

Species Name	
<i>Klebsiella pneumoniae</i>	HD
<i>Klebsiella quasipneumoniae</i>	HD
<i>Klebsiella variicola</i>	SD
<i>Legionella pneumophila</i>	HD
<i>Listeria monocytogenes</i>	SD
<i>Mycobacteriodes abscessus</i>	HD
<i>Mycobacterium tuberculosis</i>	SD
<i>Neisseria gonorrhoeae</i>	SD
<i>Neisseria lactamica</i>	SD
<i>Pseudomonas aeruginosa</i>	HD
<i>Salmonella enterica</i>	HD
<i>Serratia marcescens</i>	HD
<b>Shigella species:</b> <ul style="list-style-type: none"> <li>• <i>Shigella boydii</i> (S1 &amp; S3)</li> <li>• <i>Shigella dysenteriae</i> (S1 &amp; S3)</li> <li>• <i>Shigella flexneri</i></li> <li>• <i>Shigella sonnei</i></li> </ul>	HD
<i>Staphylococcus aureus</i>	HD
<i>Staphylococcus epidermidis</i>	SD
<i>Stenotrophomonas maltophilia</i>	SD
<i>Streptococcus pneumoniae</i>	SD
<i>Vibrio cholera</i>	SD

HD = High definition SD = Standard definition