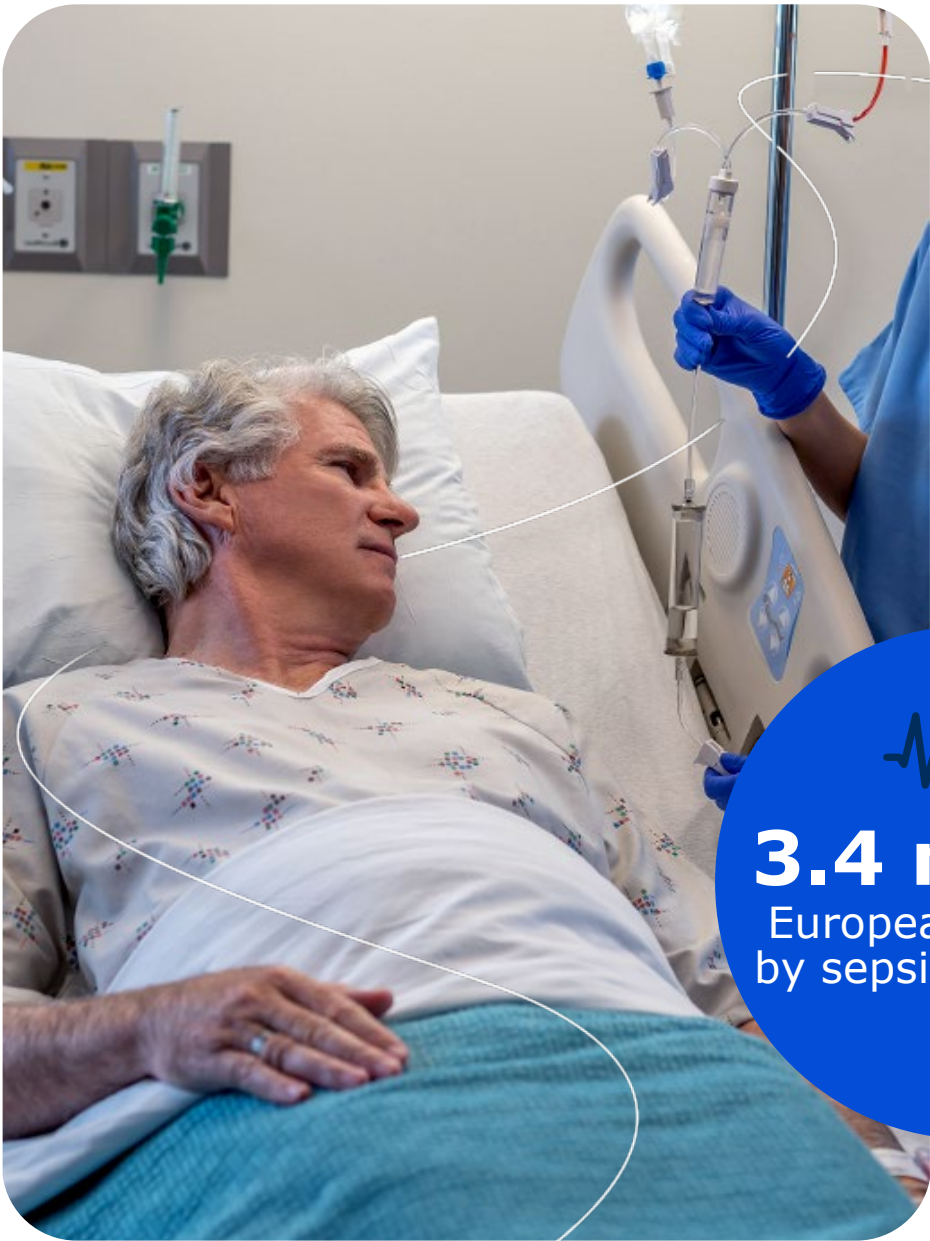




How are you impacting the

detection and management of bloodstream infections (BSIs)?





BSIs carry a high burden, both in terms of

mortality & cost


3.4 million
Europeans affected
by sepsis each year¹


22,800 €
estimated cost per
patient for severe
sepsis²



20%
estimated
mortality rate
in Europe¹



50%
increase in cost
over a 7-year
period³



2x
increase in sepsis mortality when
inappropriate antimicrobial therapy
is given⁴



The global rise of antimicrobial resistance (AMR)

will have devastating effects on lives and economies¹ if left unaddressed



Impact¹

700,000 estimated deaths worldwide annually



Cost²

€1.5 billion annually in the EU



Projections¹

10 million deaths by 2050, and up to \$1 trillion medical cost per year

World Health Organization³



Antimicrobial resistance is occurring everywhere in the world, compromising our ability to treat infectious diseases and undermining many other advances in health and medicine.



1. O'Neill J. Review on Antimicrobial Resistance: tackling a crisis for the health and wealth of nations. (2014) Accessed November 2, 2018.

2. European Commission. EU Action on Antimicrobial Resistance. https://health.ec.europa.eu/antimicrobial-resistance/eu-action-antimicrobial-resistance_en. Accessed January 31, 2023

3. World Health Organization. Global Action Plan on Antimicrobial Resistance – May 2015 <https://ahpsr.who.int/publications/i/item/global-action-plan-on-antimicrobial-resistance>. Accessed January 31, 2023



**Early & accurate
detection saves lives,**
but labs are under pressure
to do more with less

- ✓ Skilled personnel shortages and a **lean workforce**
- ✓ Rising **acuity**¹
- ✓ Increasing test **complexity and volume**²
- ✓ **Financial** constraints
- ✓ Response to **new threats**:
 - Antibiotic **resistant organisms**³
 - **COVID-19**
 - **Cyberattacks** – 240M attempted healthcare attacks in 2020⁴



To address these challenges,
you may have attempted to...



**Cross-train
more staff**
to collect blood



**Streamline
individual steps**
in the process

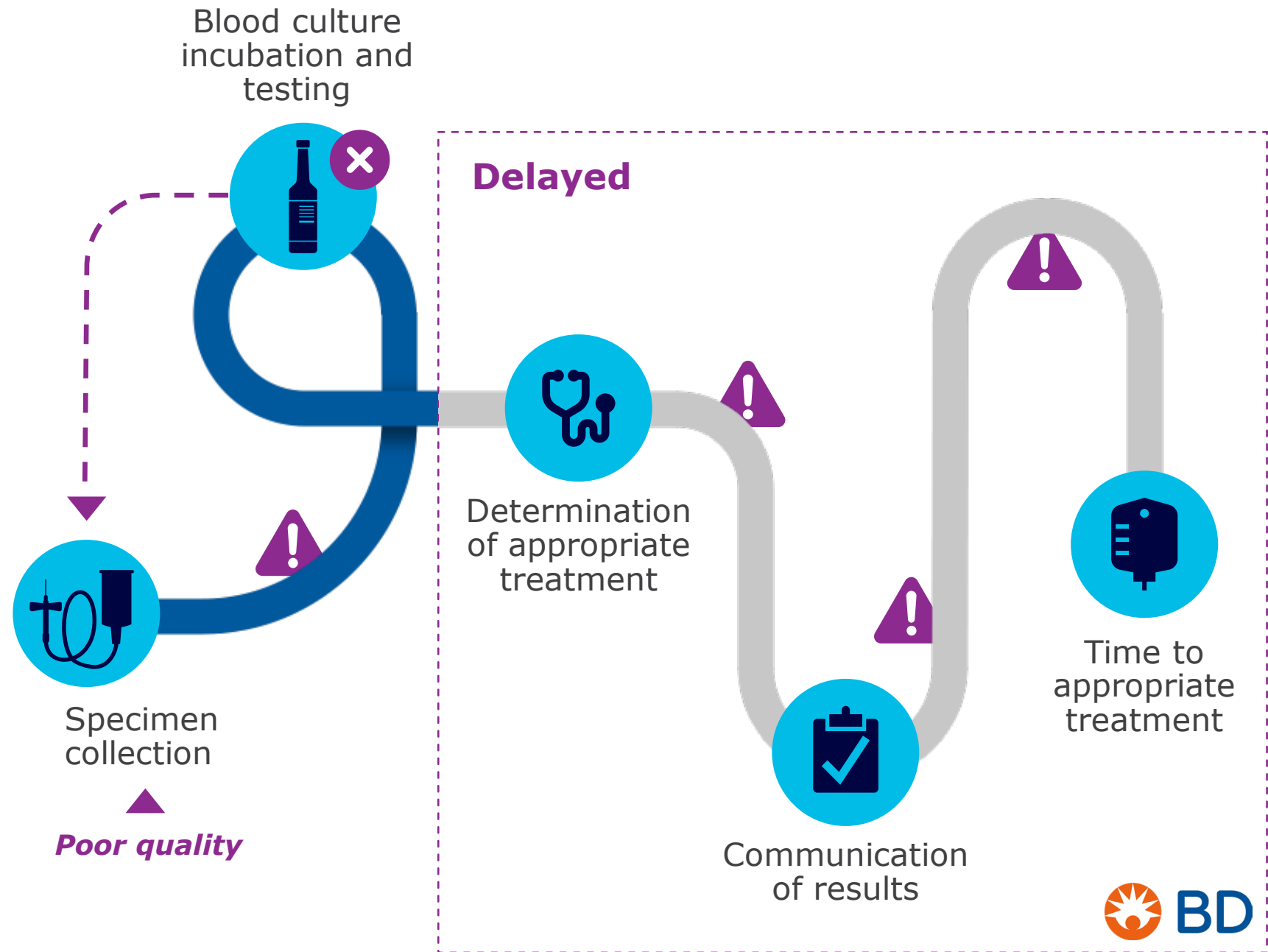


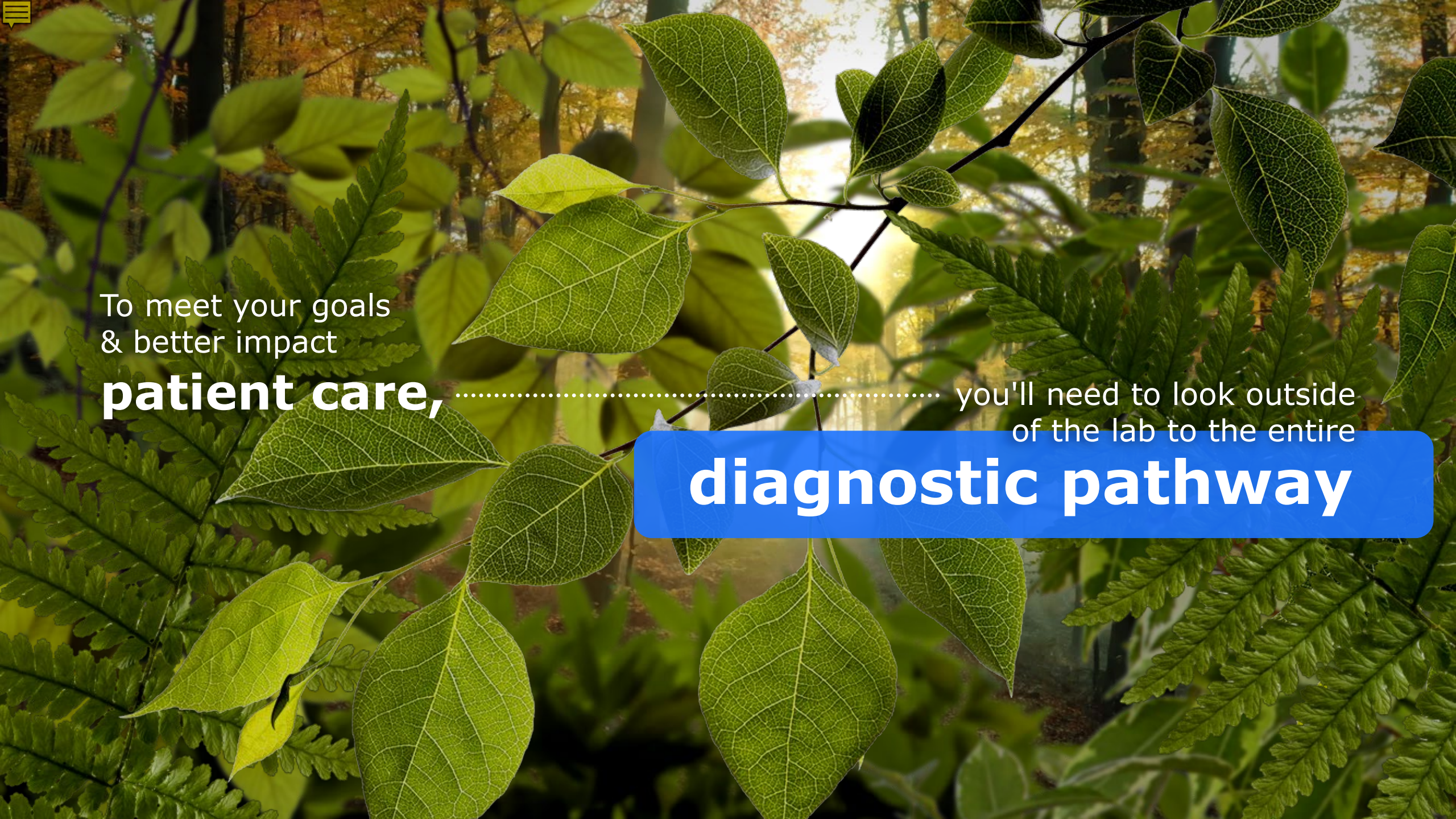
Create
improvements by
bringing in **new
instrumentation**

...and yet these measures
**will only take
you so far**

A piecemeal approach
creates risks

**just below
the surface**





To meet your goals
& better impact

patient care, you'll need to look outside
of the lab to the entire

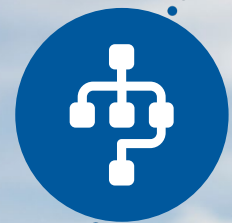
diagnostic pathway



Gain near real-time visibility and analytics to generate meaningful insights



Share insights and align functions to drive sustainable change



Simplify execution and increase accountability across the diagnostic pathway

Take a **360° approach** to BSI testing



Gain near real-time visibility and analytics to generate meaningful insights



Simplify execution and increase accountability across the diagnostic pathway



Share insights and align functions to drive sustainable change

Take a **360°**
approach
to BSI testing



When specimen collection isn't integrated into the BSI diagnostic process,

tradeoffs are made

that may not align with blood culture KPIs



Collection performed by **overloaded staff**

Increased **risk of contamination**¹ and **decreased blood volume**^{2 3}



Lack of standard ordering protocols

Increased likelihood that **inadequate # of bottles are collected**

What if you could **take an integrated approach without sacrificing efficiency and quality?**

By taking an **integrated approach to
address BSIs**, you may enable:



Sufficient blood volume collection, a
critical determinant for **organism
recovery**^{1 2}



What if you could **take an integrated approach without sacrificing efficiency and quality?**

By taking an **integrated approach to address BSIs**, you may enable:



Sufficient blood volume collection, a critical determinant for **organism recovery**^{1 2}



Improved safety by reducing the risk of needlestick injury³



What if you could **take an integrated approach** without sacrificing efficiency and quality?

By taking an **integrated approach to address BSIs**, you may enable:



Sufficient blood volume collection, a critical determinant for **organism recovery**^{1 2}



Improved safety by reducing the risk of needlestick injury³



Near-patient incubation to support faster **decision making**⁴



What if you could **take an integrated approach** **without sacrificing efficiency** **and quality?**

By taking an **integrated approach to address BSIs**, you may enable:



Sufficient blood volume collection, a critical determinant for **organism recovery**^{1 2}



Improved safety by reducing the risk of needlestick injury³



Near-patient incubation to support faster **decision making**⁴



Reduced complexity and **better patient experiences**





Unnecessary delays in obtaining Identification and Susceptibility (ID/AST) results may lead to

delays in appropriate therapy, which could increase costs and impact patient management¹



Undertreatment,
inadequate therapy

Increased **length of stay**¹ and **mortality rate**²



Overtreatment,
inappropriate therapy

Increased risk of developing **antimicrobial resistance**³

1. Battle SE, et al. J Antimicrob Chemother 2017; 72(1):299-304.

2. Adrie C, Garrouste-Orgeas M, Ibn Essaid W, et al. Attributable mortality of ICU-acquired bloodstream infections: Impact of the source, causative micro-organism, resistance profile and antimicrobial therapy. J Infect. 2017;74(2):131-141.

3. Tjandra KC, Ram-Mohan N, Abe R, Hashemi MM, Lee J-H, Chin SM, Roshardt MA, Liao JC, Wong PK, Yang S. Diagnosis of Bloodstream Infections: An Evolution of Technologies towards Accurate and Rapid Identification and Antibiotic Susceptibility Testing. Antibiotics. 2022; 11(4):511



What if you could
**support targeted treatment by taking
a holistic approach to ID/AST**
with fast and comprehensive results?

By working with a **complete ID/AST system, you'll enable:**



Clinicians to make timely treatment decisions with
ID/AST results direct from positive blood cultures





What if you could
**support targeted treatment by taking
a holistic approach to ID/AST**
with fast and comprehensive results?

By working with a **complete ID/AST system, you'll enable:**



Clinicians to make timely treatment decisions with
ID/AST results direct from positive blood cultures



Automated rapid cleanup of positive blood cultures for
downstream analysis





What if you could

support targeted treatment by taking a holistic approach to ID/AST

with fast and comprehensive results?

By working with a **complete ID/AST system, you'll enable:**



Clinicians to make timely treatment decisions with **ID/AST results direct from positive blood cultures**



Automated rapid cleanup of positive blood cultures for downstream analysis



MALDI direct from positive blood culture or colony for **robust and reliable ID**





What if you could

support targeted treatment by taking a holistic approach to ID/AST

with fast and comprehensive results?

By working with a **complete ID/AST system, you'll enable:**



Clinicians to make timely treatment decisions with **ID/AST results direct from positive blood cultures**



Automated rapid cleanup of positive blood cultures for downstream analysis



MALDI direct from positive blood culture or colony for **robust and reliable ID**



Robust phenotypic testing for **comprehensive AST coverage**





What if you could **support targeted treatment by taking a holistic approach to ID/AST** with fast and comprehensive results?

By working with a **complete ID/AST system, you'll enable:**



Clinicians to make timely treatment decisions with
ID/AST results direct from positive blood cultures



Automated rapid cleanup of positive blood cultures for
downstream analysis



MALDI direct from positive blood culture or colony
for **robust and reliable ID**



Robust phenotypic testing for **comprehensive AST coverage**



Accurate detection of emerging resistance (e.g., CPOs, VREs)
and breadth of MICs





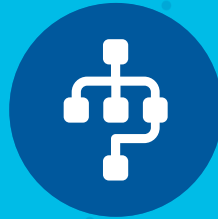
Gain near real-time visibility and analytics to generate meaningful insights



Share insights and align functions to drive sustainable change

Simplify execution and increase accountability across the diagnostic pathway

Integrated BD BSI Solution



Take a **360°**
approach
to BSI testing



Gain near real-time visibility and analytics
to generate meaningful insights

Simplify execution and
increase accountability across
the diagnostic pathway

Integrated BD BSI Solution



Share insights and
align functions to drive
sustainable change

Take a **360°**
approach
to BSI testing



Significant **blood culture-related data** exist,

but it can be

**difficult to access
or synthesize this
information,**

or to uncover insights

What if you could **translate these data into meaningful insights?**

With the **BD BACTEC™
blood culture system**
powered by BD Synapsys™
informatics, you will:



Remove blind spots
across the diagnostic
pathway



Have confidence in
your **blood culture
results**



**Automate data
aggregation** across
your network of labs
and collection sites



**Reduce
turnaround time**



Receive custom alerts
for critical results (e.g.,
CPO, VRSA, ESBL)



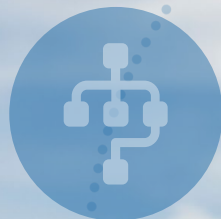
**Generate real-time
antibiograms** to drive
early therapy decisions





**Gain near real-time visibility and analytics
to generate meaningful insights**

BD BACTEC™ blood culture system
powered by BD Synapsys™ informatics
and the BD ID/AST offering



**Simplify execution and
increase accountability across
the diagnostic pathway**

Integrated BD BSI Solution



**Share insights and
align functions to drive
sustainable change**

Take a **360°**
approach
to BSI testing





Simplify execution and
increase accountability across
the diagnostic pathway

Integrated BD BSI Solution



Gain near real-time visibility and analytics
to generate meaningful insights

BD BACTEC™ blood culture system
powered by BD Synapsys™ informatics
and the BD ID/AST offering



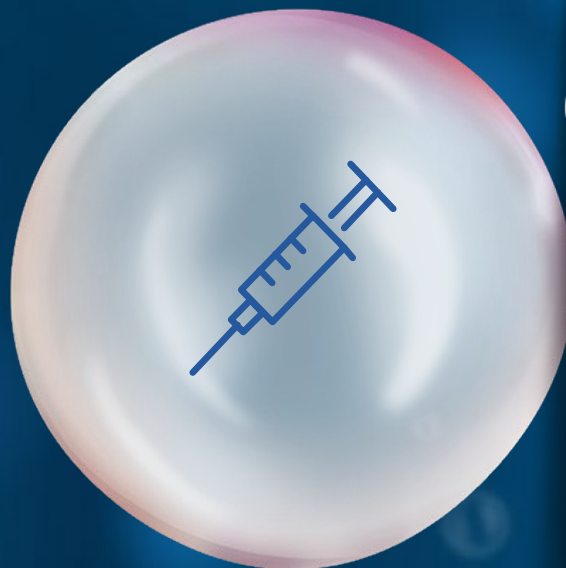
Share insights and
align functions to drive
sustainable change

Take a **360°**
approach
to BSI testing



Each function is
**dedicated
to excellence**
in their field, but...

**Nursing/
Phlebotomy**
(Specimen Collection)

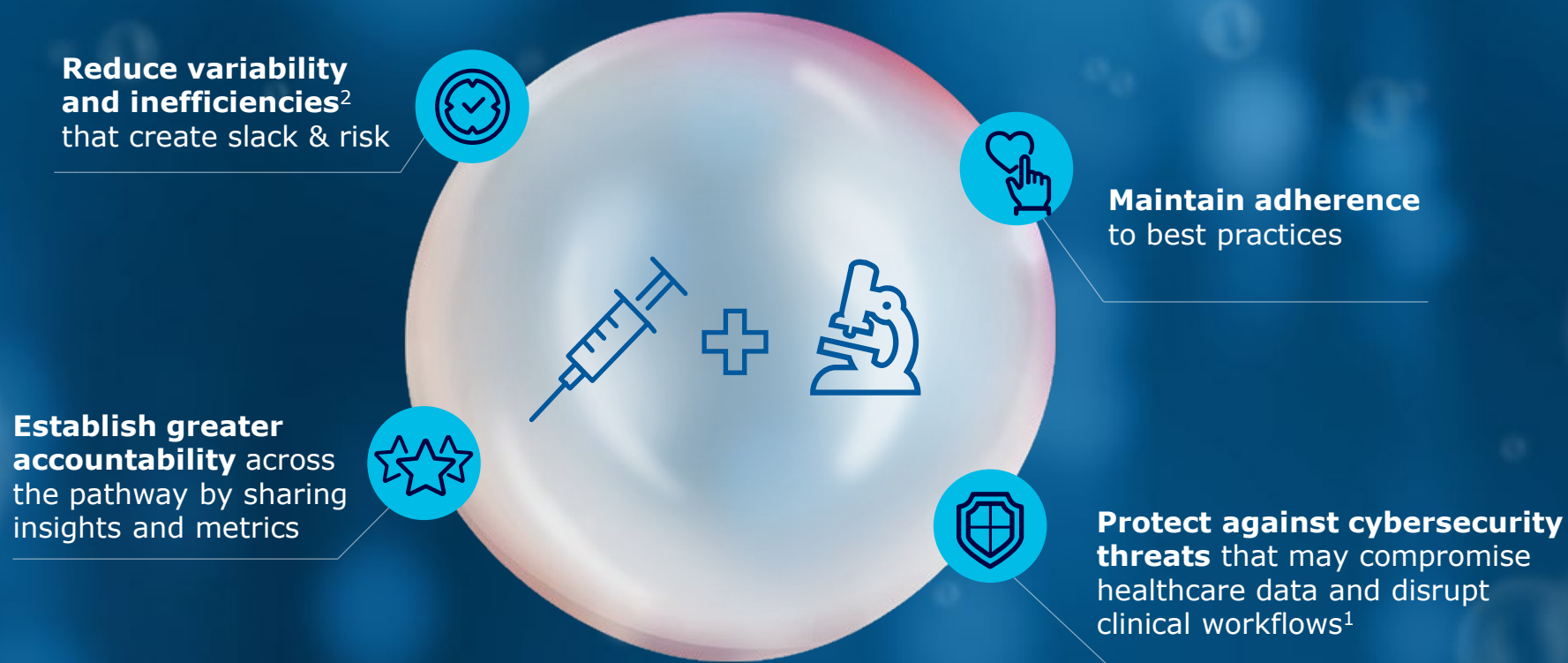


Lab
(Blood Culture
Testing and ID/AST)



What if you could bring
**all functions
together** to achieve
sustainable improvement?

With the expertise of **BD clinical and workflow** specialists combined with the insights generated from **BD Synapsys™ informatics solution** and **BD EpiCenter™ data management system**, you'll be empowered to:

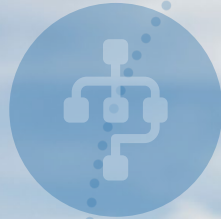


1. Applies to BD Synapsys™ only. Reference BD Synapsys™ informatics product security white paper, May 2021
2. If qualified to receive the service



Gain near real-time visibility and analytics
to generate meaningful insights

BD BACTEC™ blood culture system
powered by BD Synapsys™ informatics
and the BD ID/AST offering



Simplify execution and
increase accountability across
the diagnostic pathway

Integrated BD BSI Solution



Share insights and
align functions to drive
sustainable change

BD™ Professional Services
supported by BD informatics

Take a **360°**
approach
to BSI testing





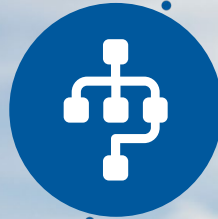
**Gain near real-time visibility and analytics
to generate meaningful insights**

BD BACTEC™ blood culture system
powered by BD Synapsys™ informatics
and the BD ID/AST offering



**Share insights and
align functions to drive
sustainable change**

BD™ Professional Services
supported by BD informatics

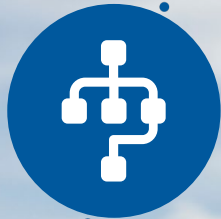


**Simplify execution and
increase accountability across
the diagnostic pathway**

Integrated BD BSI Solution

Take a **360°**
approach
to BSI testing





What's
next?

Take a **360°**
approach
to BSI testing



Thank you

Take a **360°**
approach
to BSI testing

