

FROM IOT TO PATIENT CENTRICITY

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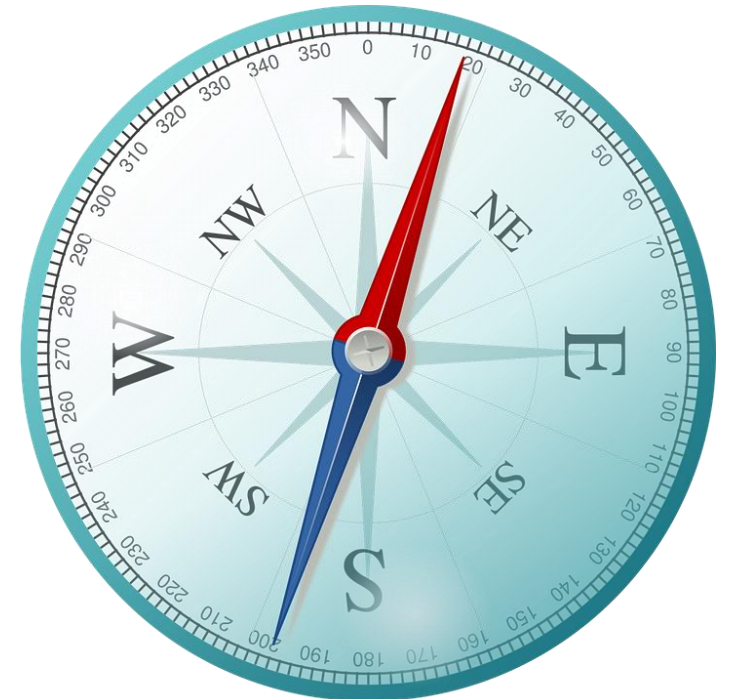


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HEALTHCARE TRENDS

Long term influence on drug delivery

- Unsustainable cost increases for healthcare
 - ✓ Outcome based reimbursement
- Improved technical capabilities
 - ✓ Smartphone/personal device apps
 - ✓ Miniaturized and cost effective transmission/sensors
 - ✓ Big data processing and analysis capabilities
- New capabilities drives new behavior in information sharing: facebook, wiki, blogs, communities, and in health monitoring and self-diagnosis



WHERE CAN "IOT" HELP?

Adherence

- Adherence (compliance) is how correctly the patient follows the treatment plan
- Low adherence is one of the most well recognized problems in Healthcare
- Reasons for poor adherence can be high treatment complexity, high costs, poor understanding, side-effects, poor communication and trust

COSTS FOR POOR ADHERENCE

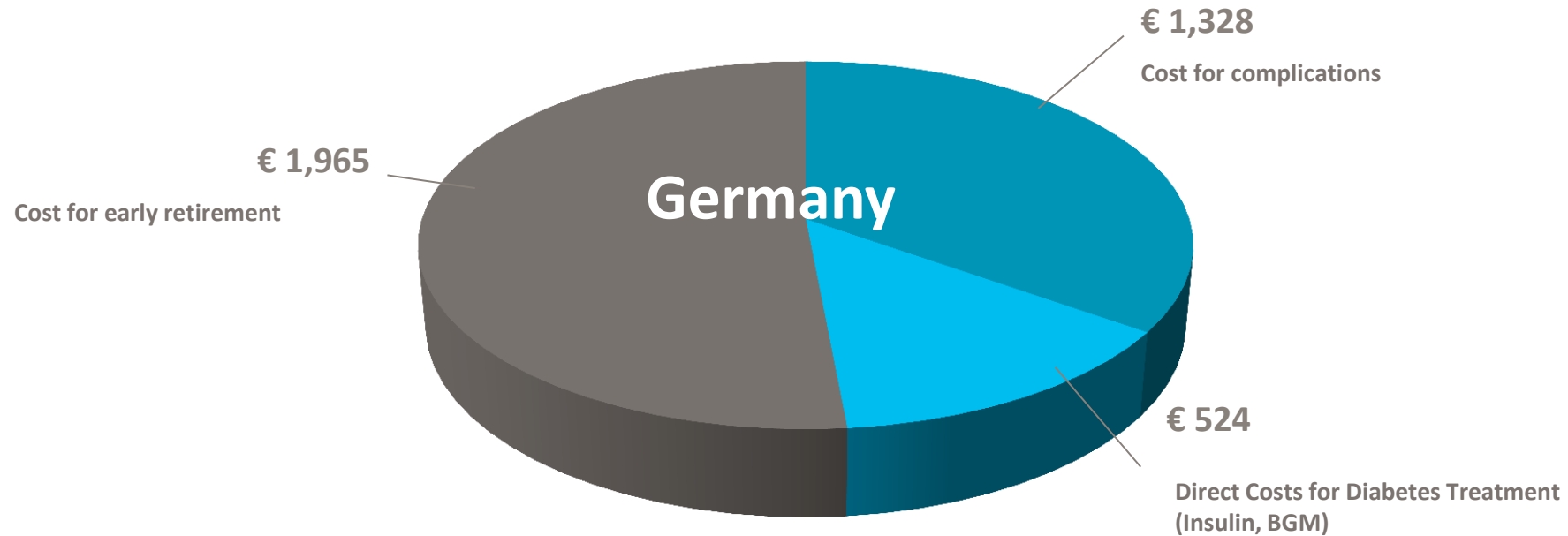
low adherence (35-90%) to medication is an on-going challenge

- Progression of illness & symptoms (suffering)
- Unnecessary switching of medication
- Large avoidable healthcare spending – US \$290Bn / Y
- Significant financial loss for the Pharmaceutical industry – US \$188Bn/Y



*Health prize Cap & Gemeni report 2012

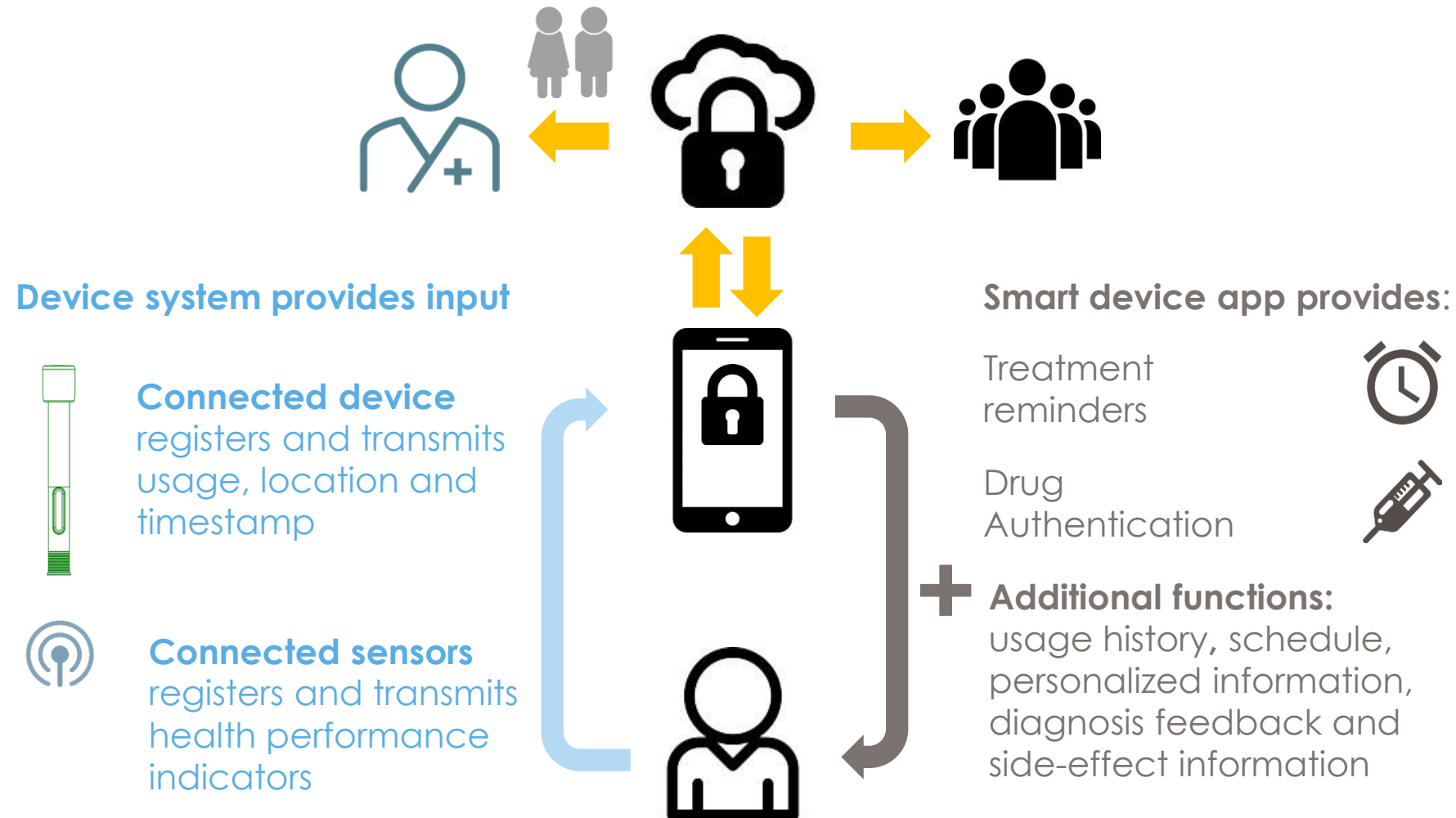
DIABETES FROM A HEALTH INSURANCE PERSPECTIVE



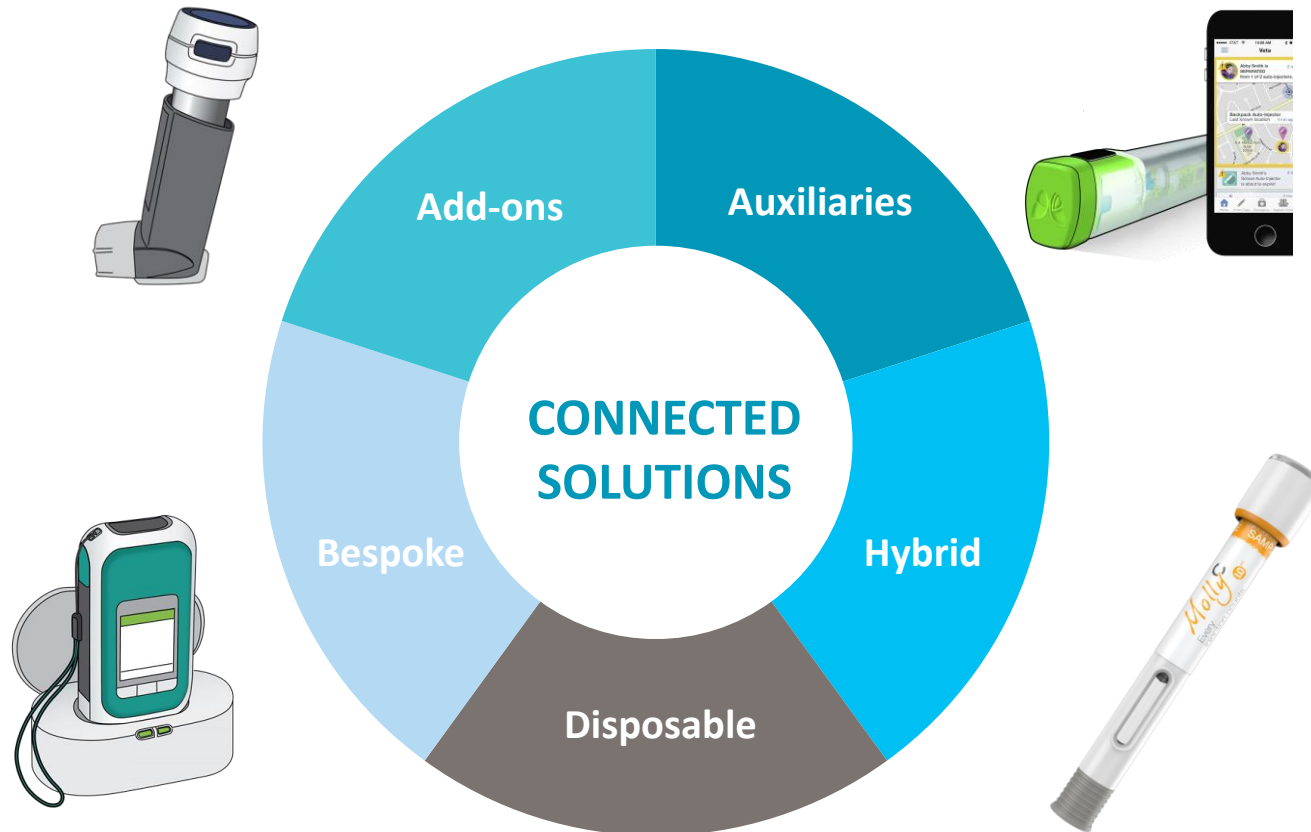
Direct treatment costs are less than 15% of total!

HOW CAN "IOT" HELP?

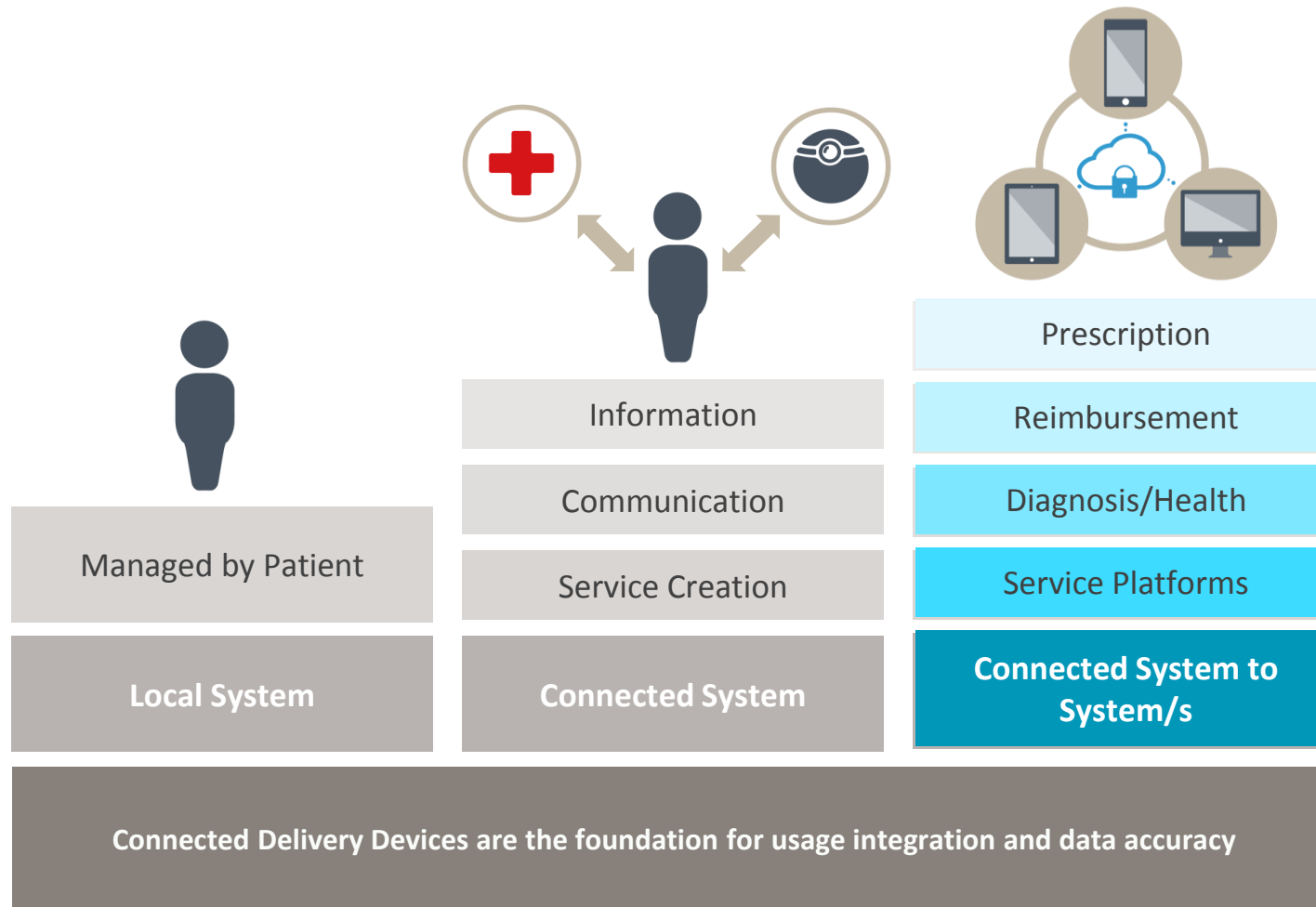
Connected drug delivery devices



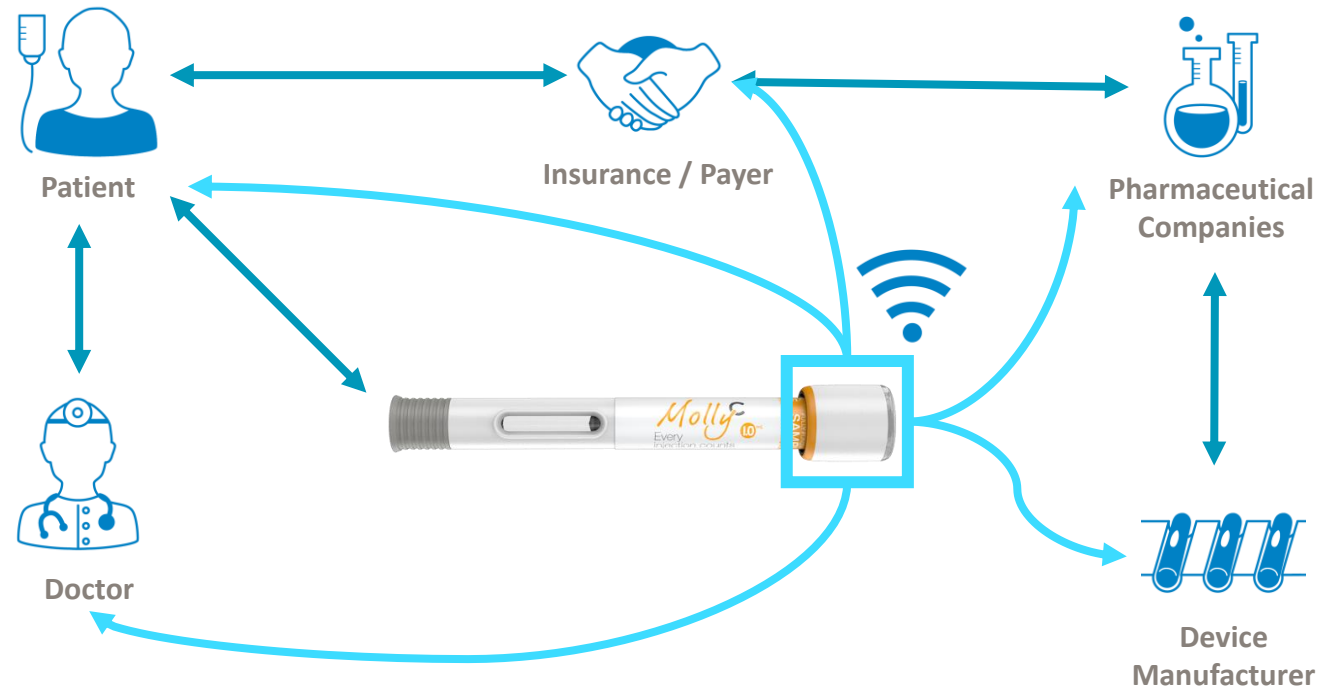
EXAMPLES OF CONNECTED DRUG DELIVERY SOLUTIONS



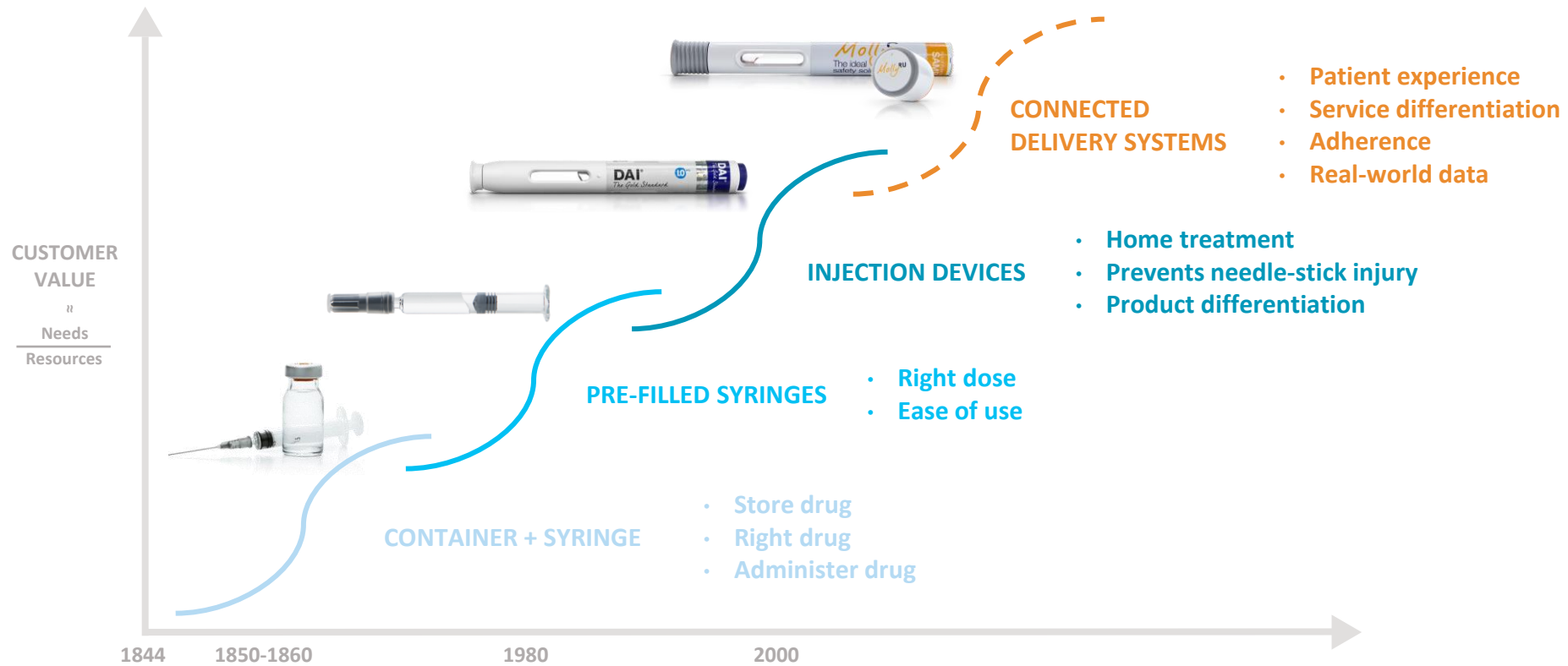
CONNECTED DELIVERY DEVICE HIERARCHY



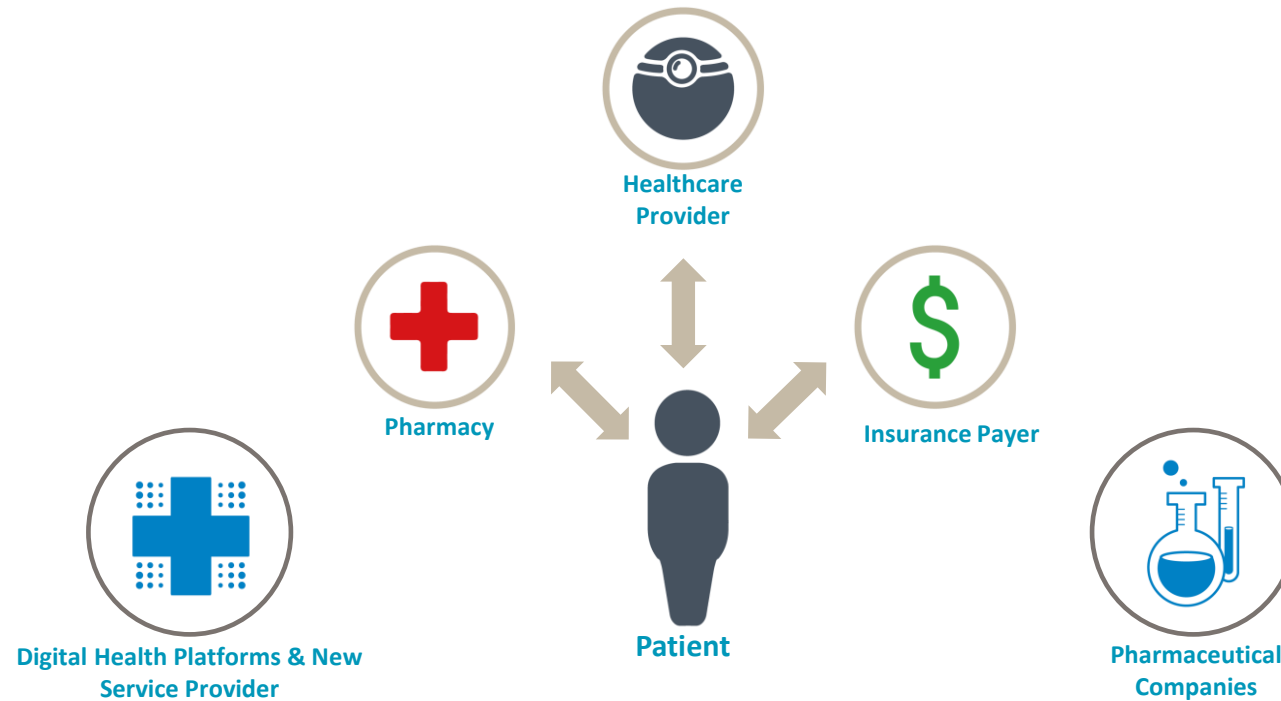
CONNECTED HEALTH – THE STAKEHOLDER NETWORK



VALUE 1ST TO 4TH GEN

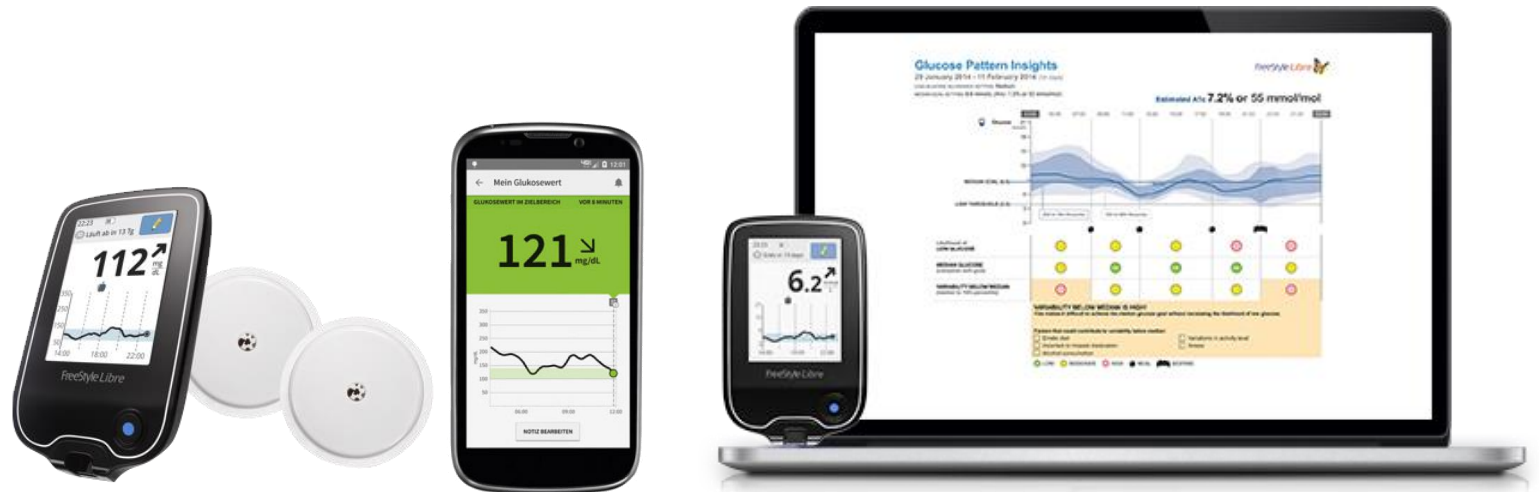


FROM PRODUCT TO SERVICE



Creating an integrated service offering

YOU CAN DO IT WITHOUT LANCETS



CREDIT: FREESTYLE LIBRE

Different levels of connectivity users can choose from

CLOSING THE LOOP BY LINKING INJECTION DATA



VALUE OF BRINGING “IOT” TO THE PATIENT

- Connected drug delivery systems will provide significant value to patients, healthcare providers and health insurers by data collection, active patient support and information sharing.
- The areas of diabetes care, asthma and COPD are leading the way for digital patient-centric innovations in drug delivery– providing real user value and cost savings to additional stakeholders.
- The value of connected systems increase, when the system expands – the challenge is to handle the complexity.



THANK YOU