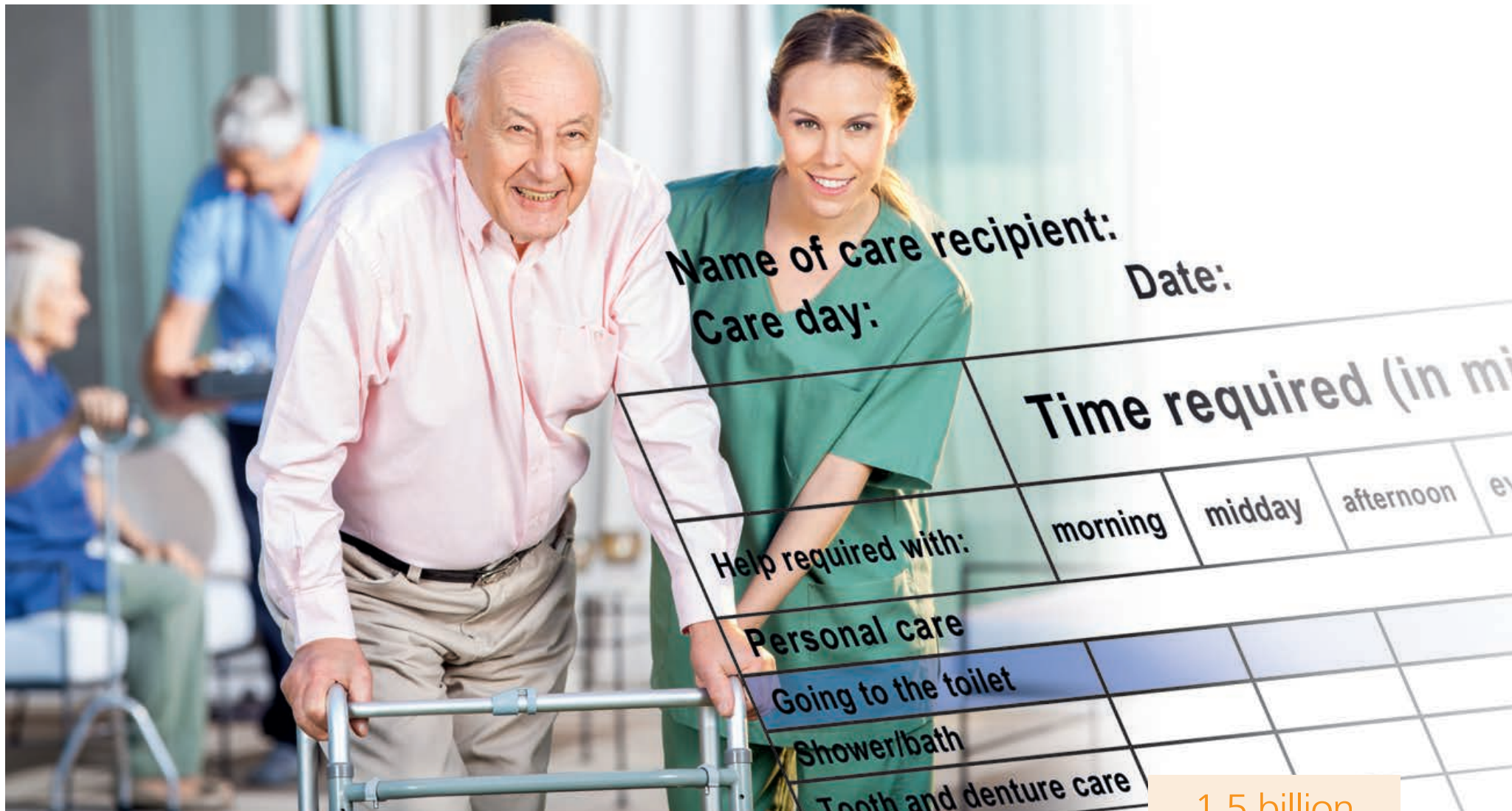


Hygiene *for the* World

Cutting-edge expertise in hygiene and infection control

Issue 2 / October 2015



Going to the toilet – a human right

People working in the care sector are under increasing time pressure, yet patients still expect their continence needs to be met, whether by going to the toilet, using a commode, or at least using a bedpan. Instead they are given the trade-off of incontinence products.

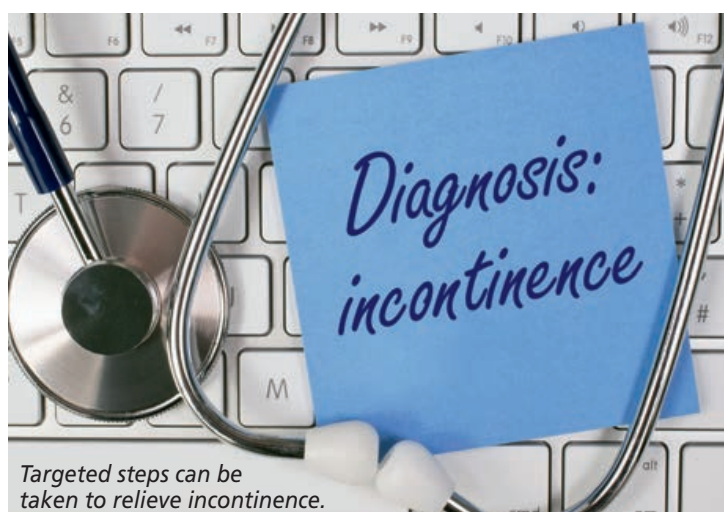
The quality of care in nursing and care environments in Germany is often viewed in crisis terms. The medical service of the Central Federal Association of Health Insurance Funds and the National Association of Statutory Health Insurance Funds publishes an annual quality of care report to evaluate how things stand – and its most recent report highlights key weaknesses in the way care facilities deal with incontinence. "Too many care recipients are given nappies or catheters when they actually don't need them," said the report.

Increasing workloads are often cited as a reason for this development, with one nappy manufacturer even stating on their web-

site that "using the right incontinence products can help avoid extra work".

This argument for deploying absorbent incontinence products is one that care critic Claus Fussek angrily rejects. He considers going to the toilet to be a basic right, and his opinion coincides with that of Claudia Mahler from the German Institute for Human Rights who discussed this topic in an interview: "People should be given assistance to go to the toilet so they can exercise this right as they see fit. Many care homes report that they simply give nappies to all the residents because it works better in their busy schedule. That limits people's right to autonomy and sanitary care."

ment on specific action to be taken can have a highly positive impact on this problem. It can also help reduce the adverse effects caused by urinary incontinence".



Targeted steps can be taken to relieve incontinence.

The German Network for Quality Development in Nursing (DNQP) has published a national expert standard for the promotion of urinary continence in care. Its stated goal is that care facilities should maintain or promote urinary continence for every patient, eliminating, reducing or compensating for any urinary incontinence issues identified among the people in their care. To justify its stance, the DNQP argues that "early identification of patients who are affected or at risk and joint agree-

1.5 billion tons of waste

In its report on sustainability, the association of nappy and incontinence product manufacturers states that nappies and incontinence products comprise between 0.3 and 0.4 percent of all Europe's waste. Based on 740 million Europeans generating 524 kg of waste per person per year, that means nappies and incontinence products add a total of 1.5 billion tons to the European rubbish pile.

Some sanitary products also make their way to the world's oceans. The German Environment Agency estimates that it takes some 450 years for a nappy to decompose without human intervention.

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"The idea of incontinence-associated dermatitis is just a way of glossing over the terrible situation we're in! "

Claus Fussek has been called many things, from a care critic and care expert to the 'pontiff of care' and even the 'angel of the elderly'. He has acquired these names over the course of 30-plus years dedicated to improving care and fighting for the rights of people in care homes and hospitals. Fussek is a member of the management team at the Munich-based organisation 'Vereinigung Integrationsförderung e.V.', which provides outpatient nursing care services. He's also the co-author of the books "In the fangs of the nursing mafia. How inhumane care has become big business" (Im Netz der Pflegemafia. Wie mit menschenunwürdiger Pflege Geschäfte gemacht werden) and "That's enough! Elderly people have rights, too" (Es ist genug! Auch alte Menschen haben Rechte). He spoke to the "Hygiene for the World" editorial team about super nappies and the basic human right of going to the toilet.

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Claus Fussek has made a name for himself as a fierce critic of the German care sector. Photo: personal

Question:

According to the most recent quality of care report published by the medical service of the German Central Federal Association of Health Insurance Funds, 76.8 percent of people in inpatient care are provided with incontinence products. Are nappies and catheters really necessary in all those cases?

Claus Fussek:

Of course not! And you have to remember that behind these anonymous statistics you're talking about the fate of thousands of real people. Over the years I've received more than 50,000 letters, phone calls and emails from care recipients, but also from caregivers. And this same topic comes up again and again. There's simply not enough time to help care recipients get to the toilet, just like there isn't

enough time to help people eat and drink. People tell me things like "my mother has stopped drinking anything because she's afraid she won't be able to get to the toilet".

People are aware of the problems, but nothing is being done

When people ring for assistance in going to the toilet they are often put off for hours – or simply told they should defecate in their nappy and then it will be cleaned up later. In the worst cases people are left in that state when they are taken to dinner in a wheelchair! That's undignified, simply terrible; it's a form of physical harm and an infringement of people's human rights. And what's just as bad is

that nobody is up in arms about it! There's simply a wall of indifferent silence; people prefer to look the other way.

Question:

You use very vivid language, which is probably why your critics accuse you of exaggeration. How would you counter that?

Claus Fussek:

I use radical vocabulary because we've spent so many years pointing out the shortcomings in the care sector, and nothing has been

Basic right to go to the toilet

In their book "That's enough! Elderly people have rights, too", Claus Fussek and Gottlob Schober present two examples from German case law which they say shows people have a basic right to go to the toilet.

One case (32 C 261/01) involved a train from Frankfurt to Dresden on which almost all the toilets were out of order. Frankfurt District Court was told that the only working toilet

was locked and could only be opened by train staff. One passenger spent two hours in agony with a full bladder. He sued Deutsche Bahn for compensation, and the judges agreed, arguing that his health had been damaged in a negligent and unlawful manner. He received 400 euros in compensation.

In the second case, an 80-year-old woman was permitted to reduce her rent by 50 percent and was granted compensation because the toilet was blocked. In a ruling by Hanover District Court on 10/10/2008 (559 C 3475/08), the judges said that the fact the toilet was unusable had endangered the tenant's health. She received 250 euros in compensation.



Questions & Answers

Question:

When is someone defined as incontinent?

Answer:

The term 'incontinence' has its roots in the Latin 'incontinentia' which has a number of meanings including inability to retain, intemperance, lack of restraint, and lack of self-control. Medical professionals make a distinction between urinary and faecal incontinence. The most frequent type of incontinence is the inability to control the urge to urinate, commonly referred to as having a weak bladder.

Specialists distinguish between stress urinary incontinence (involuntary urination due to physical exertion), urge urinary incontinence (a strong, sudden need to urinate), mixed urinary incontinence (a combination of stress and urge incontinence), overflow incontinence (poor bladder contraction or blockage), reflex incontinence (sudden leaking of urine), extraurethral incontinence (urine leakage through channels other than the urethra), and giggle incontinence (sudden emptying of the bladder caused by laughing, mostly affects children).

Back in 1998, the World Health Organisation (WHO) reported that more than 200 million people worldwide were affected by continence problems. The WHO also added, however, that incontinence is a largely avoidable and treatable condition and not an inevitable consequence of old age. There are several ways of treating incontinence including physical therapy, behavioural training, prescription medicines, bladder pace-makers and surgery. In the case of non-reversible conditions, patients can choose from a range of incontinence products.

done! There's a code of silence among experts at medical and nursing associations, funding bodies, medical services, care-related law firms, nursing science departments, and care home operators. They're aware of the problems but choose to deny, ignore, or justify them, or just play them

appreciate something they have never experienced themselves.

Question:

People who are put in a nappy in care homes even though they could have been helped to the toilet or commode by giving them just a little more time – it's de-



In its broadest sense, the concept of incontinence products includes catheters as well as adult nappies. Photos: Fotolia.com



down. The cabaret artist Dieter Hildebrandt – a friend of mine who passed away a couple of years ago – once said: if people have their fingers in everything, they can no longer make a fist. That's what stops all these shortcomings from coming to light. I've come to believe that words alone can no longer achieve anything. We should be holding a debate in Parliament where MPs are forbidden from going to the toilet and are provided with adult nappies to use during the session instead! We could even implement the same system on trains, simply handing out nappies to all the passengers if the toilets are out of order. Maybe even at the Oktoberfest.... All too often people can't fully

grading, a form of psychological harm, and sometimes physical harm, too. Google incontinence-associated dermatitis and you get thousands of hits. Put nappy dermatitis into the search engine – the rash we associate with babies – and you get thousands more hits. Aren't they effectively the same thing?

Claus Fussek:

Absolutely. The concept of incontinence-associated dermatitis is just another way of using language to gloss over the awful situation

we're in. The lack of time to help care recipients go to the toilet has prompted industry to develop 'super nappies' which can hold up to 3.8 litres of urine and only have to be changed once a day, according to the manufacturers. Everything is totally sealed so people's skin stays in contact with urine or even faeces for far too long. You would never inflict that on a child – and if paediatricians spot a persistent nappy rash, they do something about it. But it seems none of that applies to the elderly. In Germany, people's right to dignity apparently depends on their age. Broad segments of the care sector and religious organisations are accused of humiliating, cynical and inhumane treatment because of these ridiculous shortcomings. I can't understand why nothing is being done.

Question:

Aren't there any exceptions?

Claus Fussek:

Of course there are! There are some superbly run care homes with highly skilled and responsible staff who care about their patients, and there are also managers who have realised what's going on. Those kinds of organisations have adopted a hospice culture, though unfortunately they're not the norm. But it's not like we have any problem understanding they're out there! You can visit those exemplary facilities in Germany whenever you want and read about them in numerous publications. What we need is for more people to copy these beacons of hope and apply their common sense. There is another way!

Wishful thinking and reality

The German Medical Technology Association BVMed has conducted extensive research into incontinence products. One of its key findings is that expensive incontinence products shouldn't be coming out of health insurers' budgets – at least not according to the applicable medical standards.



In 2013 German health insurers spent some 464 million euros on incontinence aids.

The BVMed calculated that statutory health insurers in Germany spent around 464 million euros on

Patients with statutory health insurance are excluded from using the latest products

incontinence aids in 2013. Of this figure, some 350 million euros

went on absorbent incontinence products. A further portion was spent on alternative means of tackling incontinence such as intermittent self-catheterisation (ISC), a process in which patients use disposable catheters to avoid using an indwelling urinary catheter, which can often cause infections. Overall, these costs represent almost 0.2 percent of the total amount spent by statutory health insurers in Germany.

The BVMed website contains several other interesting findings: "We have noticed a growing discrepancy between the increasing use of incontinence products due to demographic change and a steady fall in the amount spent by health insurers per affected patient". The BVMed says that manufacturers of absorbent incontinence products are faced with the problem that the flat rates paid for care are steadily falling,

while the cost of production is rising. In the end, the people who suffer are the patients, both those in care homes as well as policyholders who receive outpatient care. According to the BVMed, affected patients only have the right to receive absorbent incontinence products which meet minimum quality standards set in the early 1990s. It argues that patients covered by statutory

health schemes are therefore excluded from the major advances that have been made in product development.

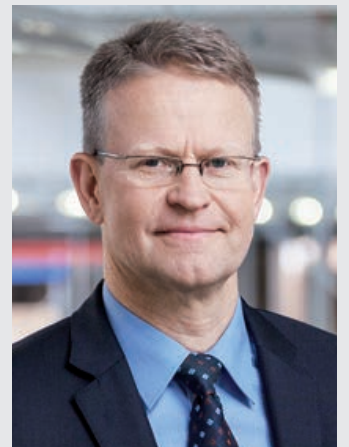
Yet patients with statutory health insurance have a right to adequate, appropriate, and cost-effective care which does not exceed the principle of reasonable cost outlined in § 12 of Book V of the German Social Code.

COMMENT

Respecting people's dignity

A quarter of Germans can imagine being cared for by a robot in their old age, according to an EMNID survey conducted on behalf of the German Federal Ministry of Education and Research. Does this mean that a long sought-after solution to the care crisis is just around the corner? It sounds like just a matter of time until the shortage of care staff will be tackled from this unexpected angle instead of the current strategy of enticing care workers out of Eastern Europe. Obviously it is not so clear-cut: for example, of the 1000 people surveyed, it was primarily the 14 to 19-year-old group which could imagine having a robot carer. Among people aged 70 or over, the figure fell to just 20 percent – either because they're less technically minded, or simply because they're closer to the time of life when they may require care.

otherwise healthy and lead an active life, incontinence aids can be a genuine blessing. They're not the target of the nappy manufacturers' 'maximum capacity' claims, i.e. the quantity of urine



Frank Hoffmann is responsible for sales of MEIKO cleaning and disinfection machines in Germany, Austria and Switzerland.

Whatever lies in store for us in the future, there's no escaping the fact that demographic change is sweeping England, Germany, Austria, Japan, and many other countries – and care recipients are suffering the consequences. Virtually every First World country is faced with increasing numbers of people who need care, and fewer and fewer people to provide it. Robots aside, the system is implementing drastic measures to 'resolve' this dilemma, much to the dismay of many experts. Care critics such as Claus Fussek, Gottlob Schober, the German Nursing Council (DPR) and the German Network for Quality Development in Nursing (DNQP) have spent years criticising the current situation and alerting us to human rights violations in care settings. As workloads increase, the quality of care suffers. One aspect of care settings which is seemingly taboo in polite conversation, yet fundamental to patients' needs, is going to the toilet, using a commode, or – however unappealing it may sound – using a bedpan or urine bottle. The alternative is an 'incontinence aid', something that sounds sophisticated, but in reality is nothing more than an adult nappy.

For people who can't always get to the toilet in time but are

their products can absorb. But it's a very different situation for care home residents who may be perfectly capable of going to the toilet if someone just gives them the time and assistance they need. For these people, adult nappies can be a demeaning experience. In some cases utilising the 'maximum capacity' means spending the whole day sitting or lying in their own excrement. That's the only way to make the nappies cost-effective, and care staff are often too busy with paperwork to help care recipients go to the toilet anyway.

As a manufacturer of washer-disinfectors for care utensils, we have spent more than 80 years focusing on this topic in the care sector. We appreciate what care staff go through when faced with the chore of clearing up human excrement. And we also know how unpleasant it is for people to be dependent on someone else when it comes to such basic physical necessities. That's why we stand up for care staff's interests, which just happen to coincide with what's best for care recipients. So we would like to make a plea to everyone in the industry: incontinence products obviously have their place – but so does people's dignity!

Bedpan management – getting it right

There is still no official definition of the best way to clean bedpans. In collaboration with the Freiburg-based German Consulting Centre for Hospital Epidemiology and Infection Control, 'Hygiene for the World' decided to draw up a step-by-step process.

One of the things that doctors agree to when they take the Hippocratic Oath is to prescribe a regimen for the health of the sick according to their ability and judgement, whilst at the same time utterly rejecting any 'harm and mischief'. Meanwhile the Interna-

failure of the job they do. Topics such as pressure ulcer prevention have expert standards to follow, but there is no process defining how bedpans should be handled and cleaned. This is significant when one considers that many experts – including Dutch infection

thing specifically intended for this purpose, such as a trolley. Alternatively it can be placed on the floor. In both cases it should be placed on a suitable mat or underlay. If the outside of the bedpan is soiled, it should immediately be cleaned with a disinfectant wipe. Care utensils such as bedpans should never be left in a position where somebody could trip over them. If necessary, bedpans can also be placed on a rubbish bin as long as there is no risk of tipping. A dirty bedpan should never be

Step 3:
The dirty utility room

The door to the dirty utility room should also be opened with either a clean hand or clean gloves. Just like in the patient's room, the door handle is a key transmission vector! Foot-operated sliding doors are an even better choice.

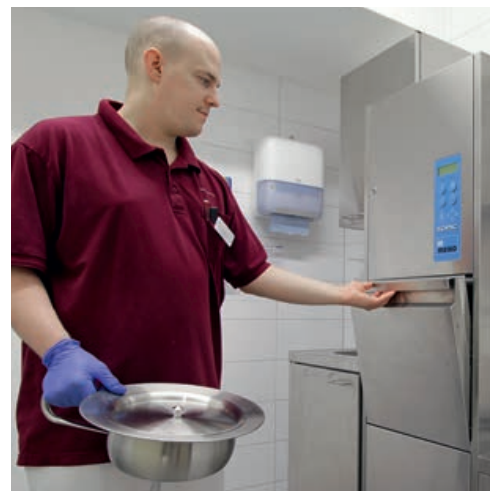
Step 4:
Opening the bedpan washer-disinfect



Dirty bedpans should be carried down the corridor quickly but carefully.



Use your clean hand to open the door to the dirty utility room.



If the bedpan washer doesn't open automatically, you should once again only use your clean hand.

tional Council of Nurses (ICN), a worldwide federation of health-care professionals, states its key goals as promoting health, preventing disease, curing the sick,



Dr. Eva Fritz works at the German Consulting Centre for Hospital Epidemiology and Infection Control in Freiburg. Photo: BZH

relieving suffering, and respecting people's lives and dignity. That certainly covers the essence of what care means in the health-care sector. Yet it is equally important to ensure that healthcare professionals apply consistent processes, since this is the only way of judging the success or

control expert and independent consultant Gertie van Knippenberg-Gordebeke – argue that bedpans are often more contaminated with bacteria than virtually any other medical device. "And yet," says van Knippenberg-Gordebeke, "bedpans are undoubtedly one of the most underestimated sources of risk in the infection control environment".

Together with Dr. Eva Fritz – a biologist at the German Consulting Centre for Hospital Epidemiology and Infection Control (BZH) and research assistant to BZH Medical Director Dr. med. Ernst Tabori – the 'Hygiene for the World' editorial team have defined a step-by-step process detailing how to deal with a bedpan after use. Dr. Eva Fritz notes, however, that flexibility is required: "There's no fixed protocol for each of these different steps. Healthcare teams should develop their own set of guidelines and send them to their infection control team for review. A sensible approach could look something like this:

Step 1:
Where to place a bedpan after use?

Assuming the bedpan deployment was planned, the best choice is to place the bedpan on some-

placed on a patient's bed or side table, and certainly not on a chair.

Step 2:
What's the next step after helping the patient?

After helping the patient to clean up and get dressed, the nurse should remove their disposable gloves and put on a new pair. That's because they will have to touch the door handle to open the door. This part of the patient environment is regarded as a key transmission vector and should only ever be touched with disinfected hands or clean gloves.

The hand or glove used to open the bedpan washer should also be clean, because it will subsequently be used to remove the disinfected care utensil from the machine. This is the only way to prevent a chain of contamination.

Step 5:
Positioning the bedpan in the machine

Obviously the bedpan should not be emptied before putting it in the machine! Simply place it in the designated rack in the bedpan washer and it will automat-

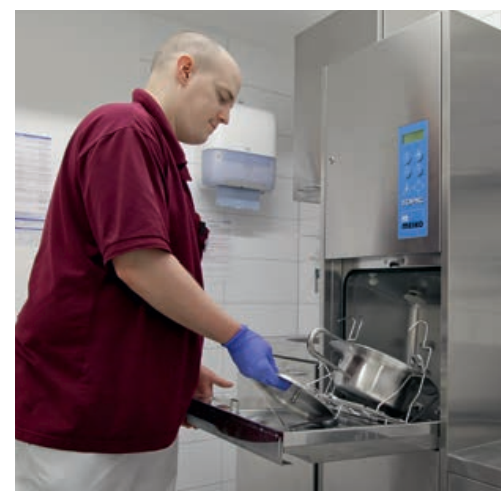
ically be emptied once the door is closed. This is the only way to stop aerosols from endangering care staff's health and prevent the dirty utility room from becoming contaminated. The bedpan lid should be placed in the separate holder designed for this purpose. It is completely unacceptable to empty the bedpan in a slop sink or toilet.

Step 6:
Start the machine

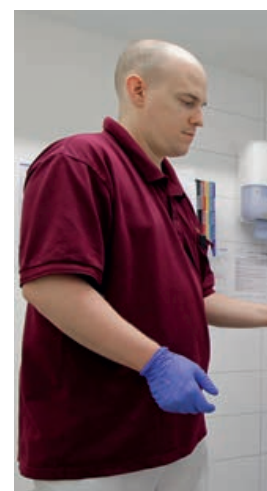
The clean hand is used to close the bedpan washer and press the start button.



Place the full bedpan in the rack in the bedpan washer...



... and insert the lid separately in the designated holder.



Use your clean hand to close the bedpan washer...





When you leave a patient's room with a dirty bedpan, it's important to ensure that you only touch the door handle with your clean hand or a new glove.
Photos: Gaby Scheewe-Pfeil



...lose the bedpan



... and press the start button.



Remove the contaminated glove...



... and dispose of it properly.



Don't forget to disinfect your hands!

Step 7: Ensure maximum hygiene

Once again, the nurse should discard their glove at this point and disinfect their hands ready for the next step...

Caution!

If the patient has a *Clostridium difficile* infection then it's not enough to just disinfect your hands. Mechanical friction is virtually the only way to remove the spores, so wash your hands before disinfecting them!

What is an A_0 value?

The A_0 concept appears in the standard EN DIN ISO 15883-1. It is a means of measuring the comparative lethality of moist heat disinfection methods, i.e. the extent to which they inactivate microorganisms.

The A_0 value is currently used to determine how much moist heat is required for thermal disinfection in mechanical disinfection processes and appliances, for example the washer-disinfectors used for surgical instruments and bedpans. The A_0 value can

be determined in-process using thermologgers. Put simply, it is the temperature applied to the surface of the instruments integrated over time.

The following table shows some key A_0 values:

A_0 value	Temperature	Time applied
600	90°C	1 minute
3000	90°C	5 minutes

If the aim is only to inactivate bacteria such as mycobacteria, fungi and heat-labile viruses (spectrum of action: A), an A_0 value of 600 may be sufficient for washer-disinfectors.

If, however, the aim is also to inactivate heat-resistant viruses such as hepatitis B (spectrum of action: B), then an A_0 value of 3000 is required.

An A_0 value of 3000 is therefore generally selected for washing and disinfecting surgical instruments.

Source: German Society of Hospital Hygiene (W. Popp, H. Martiny, K-D- Zastrow)

A very difficult case

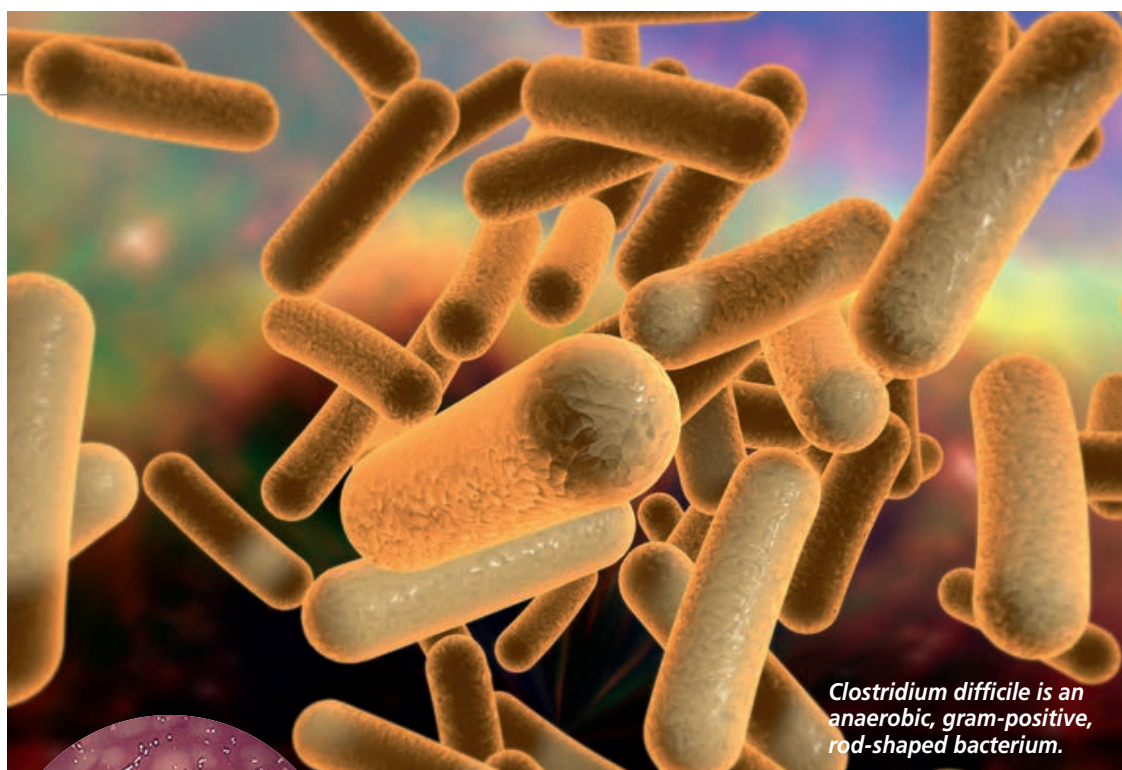
Facts and figures on the aptly named *Clostridium difficile*.

Clostridium difficile (C. diff.) has emerged from relative obscurity to become the most common cause of hospital-acquired and antibiotic-associated diarrhoea in German hospitals. The incidence of C. diff. infections (CDI) in Germany currently stands at between five and 20 cases per 100,000 inhabitants. In late 2014 Professor Dr. Franz Allerberger from the Austrian Agency for Health and Food Safety (AGES) reported on this pathogen in a debate at the European Parliament in Brussels, noting that "the frequency of *Clostridium difficile* infections is two to four times higher than that of MRSA infections". The cost of treating a CDI can be anywhere between 7,000 and 8,000 euros. The United States Centers for Disease Control and Prevention (CDC) estimate that there were some half a million C. diff. infections in 2011, causing 29,000 deaths – all within just 30 days of initial diagnosis.

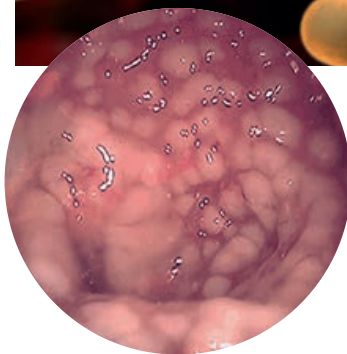
Clostridium difficile is an anaerobic, gram-positive, rod-shaped bacterium from the *Clostridium* genus. The difference to gram-negative bacteria lies in its cell wall structure, and anaerobic means that the bacteria are able to live without oxygen. It is this latter characteristic which suggests they could have been one of the first bacteria present on Earth when life emerged. The pathogen was first described in the 1930s. The epithet 'difficile' refers to the fact that C. diff. is very difficult to isolate and requires special methods of cultivation adapted to its slow growth. It wasn't until the late

1970s that scientists realised this pathogen plays a key role in cases of antibiotic-associated diarrhoea.

Confronted with an inhospitable environment, C. diff. forms endospores – extremely durable, metabolically inactive structures which are exceptionally resistant to heat, desiccation and chemical agents. The spores enable the bacteria to survive for very long periods of time even under the most extreme conditions. Once the environment becomes more favourable, with the right temperature and humidity, the spores turn back into bacteria.



Clostridium difficile is an anaerobic, gram-positive, rod-shaped bacterium.



Clostridium difficile can cause the severe gastrointestinal disease pseudomembranous colitis.

C. diff. is a common type of bacteria which is found in soil, water and the intestinal tract of humans and many animal species. Between one and four percent of the healthy population is estimated to carry C. diff. in their intestines without symptoms and can transmit spores through poor hygiene. C. diff. bacteria are potentially extremely dangerous, especially for hospital patients. That's because patients are often given antibiotics, which

also attack the 'good' bacteria found in their intestinal flora. Clindamycin, cephalosporins and quinolones suppress many types of bacteria in the gut. Clostridia bacteria step in to replace them, multiplying rapidly. This often results in a CDI, especially among elderly and immunocompromised patients and people with weakened immune systems.

One of the key symptoms is diarrhoea, which is triggered by the toxins produced by C. diff. bacteria. These toxins also destroy the patient's intestinal cells. This can lead to various different pathologies, causing varying degrees of gut inflammation and even pseudomembranous colitis, the most serious form of antibiotic-associated enteritis. Some patients also suffer from fever and vomiting. These symptoms may appear during antibiotic treatment or up to three weeks afterwards.

In 2006 the CDC came to the conclusion that C. diff. had long been underestimated and was steadily becoming more virulent. A group of researchers led by Michael Wary from the University of Sherbrooke in Canada have suggested that a genetic mutation of the bacterium may be behind these developments. Since then scientists have isolated a variant strain of C. diff. in which the *tcdC* gene is missing. This gene contains the information required to build a protein which normally limits the bacteria's toxin production. The quantity of enterotoxins A and B produced by the gene-modified bacterium is 16 and 23 times higher, respectively, than previous C. diff. strains.

As a result, infections caused by this mutant strain are typically far more severe – plus it is also resistant against fluoroquinolones, a type of antibiotic that is often prescribed in North America.

News from the world of medicine

A mothers' gut bacteria helps protect her baby

Scientists are still not sure how breastfeeding mothers' intestinal



bacteria get into their breast milk. But a research group led by Dr. Esther Jiménez Quintana at Complutense University in Madrid believes that dendritic cells may act as a mode of transport. These specialised immune cells can penetrate the gut wall without affecting its diffusion barrier. Breast-fed infants benefit enormously from their mothers' gut bacteria, which enter the infant's intestines through the milk. These benefits include encouraging the development of the child's immune system as well as bolstering its defence against pathogens. "These new findings show that the composition of each mother's milk is unique and

cannot, in fact, be replicated. Each mother is specially adapted to her child and has a genetic influence on that child's development," says Prof. Dr. Michael Abou-Dakn, presenting the findings to Medscape Germany. He is the Senior Consultant of the gynaecology and childbirth clinic at the St. Joseph Hospital in Berlin-Tempelhof.

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Even straightforward pathogens can be dangerous

The huge challenges posed by drug-resistant bacteria are the subject of much discussion worldwide, prompting a major search



for solutions. This has obscured the fact that even straightforward, non-resistant pathogens can still be decidedly dangerous. The Deutsche Medizinische Wochenschrift (German Medical Weekly)

recently devoted two special issues to the question of how best to treat *Staphylococcus aureus* bacteremia. This pathogen may not be antibiotic-resistant, but it is still difficult to treat. Some patients, primarily those with immunosuppressive therapies such as biologic agents, are no longer immune against a multitude of pathogens. The authors note that 20 percent of the population are colonised with this pathogen, including strains for which multiple antibiotics are still effective. Nevertheless, they still frequently resulted in dangerous cases of osteomyelitis (infection and inflammation of the bone marrow), endocarditis (inflammation of the inner layer of the heart, pictured) and meningitis (inflammation of the meninges). These secondary clusters are often discovered too late, say the authors, arguing that close attention should be paid even when not all the expected symptoms are present.

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Inadequate hygiene in abattoirs

Over the past 10 years, Germany has seen a 10 percent increase

in the number of intestinal diseases caused by *Campylobacter*. Frequently transmitted through the consumption of poultry, this bacterial infection was observed in a total of 71,000 people in 2014, up from a figure of just 55,803



Photo: Fotolia.com

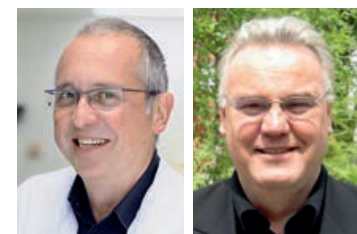
in 2004. Random sampling conducted in 2013 found the bacteria in 52.3 percent of chickens tested. In 2011 this figure stood at just 40.9 percent.

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How Switzerland compares to Germany

118 of Switzerland's 293 hospitals took part in a survey investigating the frequency of surgical site infections. A comparison with equivalent results from Germany shows that Switzerland's rate of hospital-acquired infections is two to three times higher than the rate in Ger-

many. The findings were reported by Professor Dr. Walter Popp (Essen University Hospital) and Dr. Klaus-Dieter Zastrow (Vivantes Hospital Berlin) in the latest 'Hygiene Tip' published by the German Society for Hospital Hygiene (DGKH). The two experts consider it unlikely that medicine in Switzerland is somehow lagging behind Germany and suggest that the striking difference is probably due to the methods used to collect the data. In Switzerland efforts are made to obtain data on every patient by phone after they leave hospital, while in Germany patients are only



Dr. Walter Popp Dr. Klaus-Dieter Zastrow

tracked after a hospital stay if they actually return to the hospital where they had surgery to report an infection. As a result, the follow-up rate in Switzerland is 92 percent as compared to just 31 percent in Germany (source: www.krankenhaushygiene.de).

Healthy animals helping the sick

Hospitals generally have a strict 'no animals' policy which makes it impossible for pets to visit their sick owners. Infection control experts are typically too nervous about letting dogs or cats near patients, though exceptions are becoming increasingly common. For example, the University Medical Centre Göttingen recently hit the headlines for allowing dogs to visit their seriously ill owners in the palliative care ward to provide emotional support. That's something that Professor Dr. Christoph Aspöck – Director of the Institute of Hygiene and Microbiology at St. Pölten University Hospital in Austria – actively welcomes. His interest in the subject was prompted by a chance meeting with some very special canine helpers: "We had two therapy dogs at the Children's Hospital in St. Pölten which I happened to meet," he recalls, explaining that this experience prompted him to engage with this issue both as an infection control expert and microbiologist and also as the son of Horst Aspöck, a world-famous parasitologist and entomologist. "I've always enjoyed discussing the ins and outs of parasitology with my dad," says Christoph Aspöck.

In fact he had already written an article on the infection control aspects of animal-assisted therapy in a 2004 issue of 'HYGIENE MONITOR', a journal he has edited

diseases transmitted from vertebrate animals which can be dangerous to humans. So far experts have identified some 200 diseases which occur in both humans and

The primary fungal zoonoses, Aspöck continues, involve *Microsporum* and *Trichophyton* fungi. Symptoms include hair loss as well as weeping, crusting and scaling of the skin. Helminths are often transmitted by dogs, which are the main transmitter of cystic echinococcosis, a disease in which larvae hatched from dog tapeworm eggs form cysts in the liver or lungs. Dogs and cats can also excrete roundworm eggs which can cause toxocariasis in humans if ingested. Although many cases are



Therapy dogs can be of incalculable value to patients – provided they are healthy, wormed and vaccinated.

ed since 1995. Even at that time animal-assisted therapy was a recognised method of treatment. In the case of children with behavioural disorders, contact with animals had been shown to promote their normal development, says Aspöck, though he adds: "In spite of all the opportunities and improvements that can stem from

Zoonoses: one of the risks that animals can pose to humans

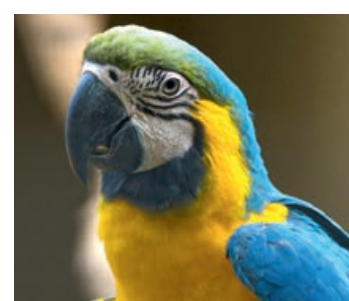
this kind of animal support, you still have to consider the possible risks. As well as problems such as jumping up at people, biting or scratching, and triggering allergies, there is also the very real risk that animals can carry pathogens which can cause infections."

One particular consideration is the issue of 'zoonoses' – infectious

animals and which can be transmitted in both directions. Aspöck explains that this involves all types of pathogens, including viruses, bacteria, fungi, protozoa (single-cell parasites), helminths (worms), and ectoparasites (parasites which live on, rather than in, their host). One of the best-known viral zoonoses is rabies, though this is not a concern for animals which have been vaccinated. Cat pox is caused by a pathogen very similar to the cowpox virus and can lead to poor wound healing and/or swollen lymph nodes.

Bacterial zoonotic infections can be caused by *Campylobacter* and *Salmonella*. "The relevant transmission routes are generally through defecation (excreta), but some bacteria such as *Bartonella* and *Pasturella* can also be transmitted through bites and scratches." *Chlamydia* bacteria are primarily excreted in bird droppings and can cause respiratory infections.

A dog roundworm in a Petri dish
Photo: Wikipedia



Birds are not suitable for animal therapy because they can transmit certain types of *Chlamydia* bacteria. Photo: Fotolia

asymptomatic, this disease can occasionally attack organs such as the eyes.

"I'm confident that you can totally prevent these cases by applying a sensible set of rules to animal visits in hospitals," says Aspöck. He considers animals such as dogs and cats, which have learned bowel control as part of the process of domestication, to be the perfect



Professor Christoph Aspöck runs the Institute of Hygiene and Microbiology at St. Pölten University Hospital in Austria.

candidates for animal-assisted therapy. As long as the animals follow specific routes in the

Having a separate area for pet visits would be the ideal solution

hospital when visiting patients, Aspöck feels comfortable with this approach – provided that the animals are well cared for, wormed and vaccinated. He suggests that it would also be possible to have a separate visitors' area for patients to spend time with their pets,

though he notes that "patients who have contact with animals should obviously have an intact immune system". Aspöck adds, however, that birds are not appropriate for hospital visits. Nor are reptiles such as turtles, for example, since their droppings are very likely to be contaminated with salmonella.

One four-legged friend which, under the right conditions, is always welcome at the bedside is a guide dog. These valuable companions for blind people are generally well cared for, wormed, well exercised and capable of behaving perfectly.

Tel Aviv hospital takes in one man and his dog

Animal-assisted therapy is an alternative therapeutic intervention which is often used to treat psychiatric, neurotic, neurological and mental disorders. In addition, dogs are used to provide targeted support to certain groups, for example through visits to geriatric and care homes and daycare centres. The dogs participate in specific activities, helping to promote people's quality of life and sense of well-being through their calming and reassuring nature and their inclusive style of communication. Most people can establish some kind of bond with these canine helpers. Recently newspapers reported

that a dog in Israel had joined its owner in the ambulance after he collapsed in the street. It appears the paramedics were unable to persuade the dog to leave the man's side. The hospital also decided to let the dog remain with its owner, temporarily relaxing their infection control guidelines. The dog was even allowed up on the bed of its owner, who had suffered a heart attack, as Avi Schoschan, a spokesman for the Ichilov Hospital in Tel Aviv, explains: "This is obviously an extremely unusual case. The dog wouldn't leave its owner's side, so we simply didn't have any other choice."

Community life is important in care homes, too

There was a time when it seemed the reputation of German care homes simply couldn't get any worse. What put the industry back on its feet wasn't so much image consultants as people like Miriam Schubring, a dedicated geriatric nurse who puts her heart and soul into running the St. Ilgen Intergenerational Centre. In terms of the overall image of German care homes, the statistics platform 'statista' reports that a good 58 percent of people living in Germany believe that care homes treat their residents with respect, and 46 percent think that care home staff are well qualified. Nevertheless, there is still plenty of room to improve things. And fortunately some of those much-needed improvements are already underway...

The Intergenerational Centre in the Leimen neighbourhood of St. Ilgen is a textbook example of a care home – though since textbooks only ever tell part of the story, it's

patients, some of whom require such intensive care? "We base our work on the principle of integration," says Schubring, insisting that the Intergenerational Centre should

The 34-year-old visited schools, the municipal council, the local hospice, and many other local facilities. "The idea is that our residents' lives should be as nor-

a reminiscence and storytelling café which stemmed from the neighbourhood assistance scheme, plus numerous volunteers who organise group singing lessons

wanted to do. Much like Miriam Schubring, he is someone who follows his convictions – and that's one of the key reasons why he swapped his desk job for the chance to help people.



Miriam Schubring runs the St. Ilgen Intergenerational Centre and makes every effort to forge links between her staff and residents and the local community. Photo: Gaby Scheewe-Pfeil



The Intergenerational Centre is located in the heart of St. Ilgen in the same building as a daycare nursery. The goal is to achieve optimum neighbourhood management.



Enjoying life and staying active are key priorities at the Intergenerational Centre, and it's clear that the residents welcome this approach. Photos: Evangelische Heimstiftung

probably more accurate to say this is the kind of care home people dream of. Run by the Protestant charitable organization Evangelische Heimstiftung, it is currently full, with 45 residents. "Their ages range between 56 and 101," says care home director Miriam Schubring, explaining that they cater to "fit and healthy" senior citizens as well as people who are suffering from severe dementia and even patients in a persistent vegetative state. How can such a small non-specialist facility deal so well with such a wide range of

reflect real life in a community. She notes that anything can happen and everything is possible if people are prepared to integrate it! Patients who require high levels of care rub shoulders with patients who are very independent, and particular efforts are made to break down the boundaries between life inside and outside the home. Communication, communication, communication has been the bedrock of Schubring's approach not only since the home opened in March 2014, but also in the months beforehand.

mal as possible. Ideally their daily routines shouldn't differ greatly from those of people who don't live in a care home. Encounters

It's important to foster contact between different generations

therefore form an integral part of her strategy. The Intergenerational Centre is close to a bakery, a grocery store, and a lottery kiosk and – even more importantly – it is in the same building as a daycare nursery. "That encourages contact between different generations," says Schubring, "even if it's just a smile or the pleasure people take in seeing a baby." And the Intergenerational Centre gets an extra dose of vitality from pupils who come on visits from schools in St. Ilgen and from the English Institute in Heidelberg. The "young folk" come on placement courses – instead of taking classes in religion, they can choose a community involvement path which involves visiting senior citizens to play together or do strength and balance training. There is also

and similar activities. It's hard to imagine a more successful neighbourhood management strategy!

Of course the home has to manage its care services, too. Residents are encouraged to be as active as they possibly can be. Incontinence products are not considered to be a suitable way of 'saving time' on care provision. There are plenty of commodes available on the ward, and anyone who can't leave their bed to go to the toilet is provided with a bedpan. The home also manages bedpan hygiene in an exemplary fashion. Just like many other institutions run by the Evangelische Heimstiftung, the Intergenerational Centre relies on warewashing, cleaning and disinfection technology from MEIKO. Dominic Stegmeier is so used to carrying full bedpans to the dirty utility room that he could almost do it with his eyes closed. He meticulously follows the guidelines for using and changing gloves and positioning care utensils correctly in the machine. His top priority is to return to 'his' charges as quickly as possible. The 33-year-old former clerk recently finished his training as a geriatric nurse and is finally doing the job he's always

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The St. Ilgen Intergenerational Centre is a non-profit subsidiary of the Protestant care home charity Evangelische Heimstiftung GmbH (EHS). EHS – a member of the religious charitable organisation Diakonisches Werk – is a modern, not-for-profit company which runs 82 care homes, a rehabilitation clinic and a facility for people with disabilities, as well as mobile services and numerous assisted living facilities. Overall, EHS employs around 7,000 people who work with some 10,300

people in need of care and assistance. That makes it the biggest company in Baden-Württemberg to offer social services in the field of geriatric care. EHS places a major emphasis on holistic care which nurtures people's body, spirit and soul. People are at the centre of everything it does, and its Protestant charitable ethos can be seen in its commitment to providing outstanding care for the people in its charge. Learn more at www.ev-heimstiftung.de