this week

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NHS loses 162 000 more patient files

The loss of more than 700 000 items of NHS clinical correspondence, reported earlier this year, has been compounded after officials admitted that a further 162 000 patient files went missing over five years.

The scandal first emerged in March 2016, when it was discovered that since 2011 thousands of files, including test results and diagnoses, had been misplaced while being delivered to hospitals and GPs in England by NHS Shared Business Services, an agency co-owned by the Department of Health and the IT company Sopra Steria. This June, the National Audit Office identified around 1700 cases where patients could have been harmed and said the saga had cost the NHS at least £6.6m.

Appearing before the House of Commons Committee of Public Accounts on 16 October, NHS England's chief executive, Simon Stevens, said that an investigation had revealed the loss of an additional 12 000 items held by NHS Shared Business Services, and a further 150 000 items in failures in the NHS mail redirection service.

Stevens said that the investigation had found no evidence that any of the 1700 patients identified in the NAO report had suffered clinical harm, although 941 instances still needed to be checked.

He said the extra 162 000 items had been identified as a result of NHS England being "very rigorous in turning over every stone."

MPs on the committee turned up the heat on Stevens after the disclosure. Conservative Geoffrey Clifton-Brown, said, "You tell us the bombshell that while on a trawl of local trusts you find another 12 000 and then you found another 150 000 items.

"Until you have sifted through them, you don't know whether there is a serious case where somebody is dying because the notes haven't been transferred. So when are you going to get on top of this situation?"

Stevens said that all 162 000 items would be sent back to GPs for checking by the end of December but admitted that it would take until March 2018 to complete the process. He added that NHS England would release funding to practices on top of the £2.5m committed to check the correspondence.

Richard Vautrey, chair of the BMA's General Practitioners Committee, said, "It is simply unacceptable that even one piece of data is lost, let alone more than 800 000 letters and other information that NHS Shared Business Services has a responsibility to safeguard."

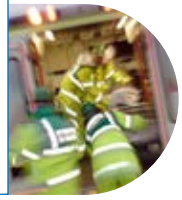
Gareth Iacobucci, *The BMJ*

Cite this as: *BMJ* 2017;359:j4822

Simon Stevens, chief executive of NHS England, was asked by MPs when he was "going to get on top of this situation"

LATEST ONLINE

- GP who had "wholly inappropriate relation" with patient is struck off
- Authors of US dermatology guidelines did not declare conflicts of interest
- NHS aims to expand emergency department workforce to combat pressures



Europe steps up action against vaccine hesitancy as measles outbreaks continue

The goal of eliminating measles from Europe was dealt a blow last week after new data showed outbreaks continue to sweep the continent.

Nearly 19 000 cases were reported in the EU from January 2016 to October 2017, including 44 deaths, show figures collected by the European Centre for Disease Prevention and Control (ECDC).

The figures were released as the centre steps up initiatives in response to a rise in so called "vaccine hesitancy." Speaking to *The BMJ*, the centre's director, Andrea Ammon, said that governments and doctors needed to engage head on with parents over safety concerns. She praised Denmark, where rates of human papillomavirus (HPV) vaccination have plummeted, for taking its message to social media in a campaign that is showing early promise.

"Safety is the most important determinant in deciding whether to vaccinate or not," said Ammon. "People's perception of risk is affected because they don't see diseases like measles routinely anymore. Doctors are an important and trusted source for patients but are not always as informed as they should be."

Mandatory vaccination

Recent measles outbreaks have occurred in several European countries, with the highest numbers of cases in Romania (7570), Italy (4617), and Germany (891), and are linked to inadequate vaccination coverage. As many as 87% of cases involved unvaccinated people, of whom nearly half (47%) were over 20 years old.

The outbreaks have seen an increase in compulsory vaccination policies across Europe, with Italy passing a law to enforce mandatory childhood vaccinations this year, and France due to pass similar legislation in early 2018.

Waning vaccine confidence is not just confined to measles. In Denmark, rates of HPV vaccination among 12 year old girls have dropped sharply in recent years. Latest figures (2016) show that only 22% of girls in this age group received both HPV vaccine doses, down from a peak of 80% in 2012. In Ireland, where a group called REGRET campaigns against HPV vaccination, rates fell by 15% in two years.

Prepare to be creative

Ammon said that mandatory vaccination policies were not necessarily the answer. "People are watching what happens in France very closely. These changes have to be done in the context of the country, and it won't suit everyone." Instead, she said, health authorities had to be prepared to be creative.

"We have to get out of our comfort zone and do something new. We may have to change our approach—we have so far focused on evidence in a transparent way, but we may have to think about how to add an emotional component," she said.

Denmark has drawn praise for responding dynamically to HPV vaccination concerns. Working with the Danish Medical Association and the Danish Cancer Society, the national health authority has signed up a network of doctors to a Facebook campaign, to respond individually to parents who post concerns on the platform.

Bolette Søborg, national manager of the authority's childhood vaccination programme, said that a rise in adverse event reporting about the HPV vaccine had led to the sharp drop in coverage. A popular 2015 documentary, *The Vaccinated Girls*, featured three girls who reportedly experienced postural orthostatic tachycardia syndrome after vaccination. The film's reach was widened by a social media campaign led by parent organisations.

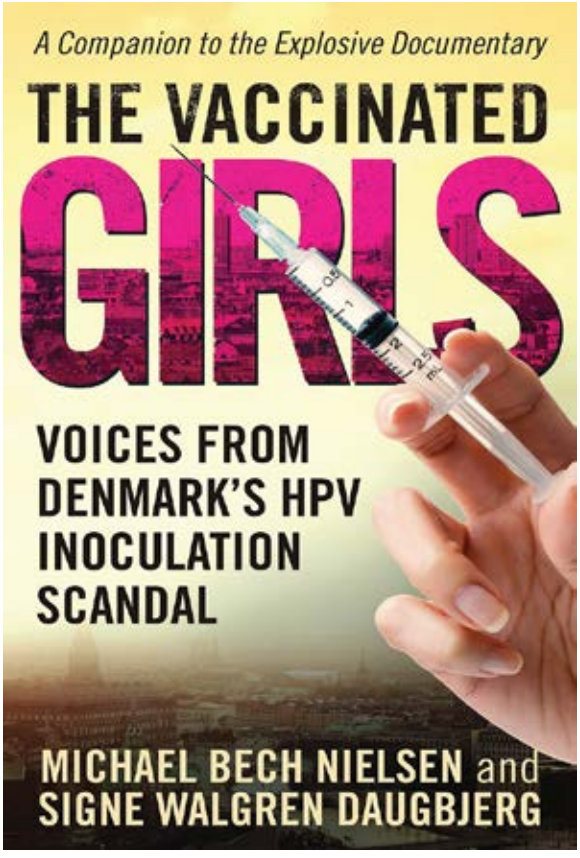
"We suspected that a lot of concern was driven by people communicating on Facebook," said Søborg. "Parents were looking to their own networks for information and not coming to our website. So we were dealing with passive information on social media."

The health authority surveyed parents to find out who made decisions about vaccinations, what questions they were asking, and where they sought advice. The resulting Facebook campaign, "Stop HPV, Stop Cervical Cancer," targets vaccine hesitant mothers with personal stories of women with cervical cancer.

Since May, Denmark's HPV vaccinations have risen to 4200 a month, up from 2200 a month in 2016.

Rebecca Coombes, *The BMJ*

Cite this as: *BMJ* 2017;359:j4803



A 2015 TV documentary preceded a sharp drop in HPV vaccination rates in Denmark

IN IRELAND, where a group called REGRET campaigns against HPV vaccination, rates fell by 15% in two years

THE BIG PICTURE

Blood lines

It is a life force and can be life taking, if infected, and as a new London exhibition proves, blood is a powerful inspiration for artists around the world.

"BLOOD: Life Uncut" is part of an autumn series of performances, events, and workshops across the capital, organised by Science Gallery, part of King's College, London.

Among the exhibits at the Copeland Gallery is the installation *The Body is a Big Place*, created by Helen Pynor and Peta Clancy, featuring blood animated by a perfusion system, which explores the processes of blood transfusion and transplantation.

Other artists tackle issues such as menstruation, Ebola, sickle cell anaemia, and blood donation, in a variety of media.

Daniel Glaser, Science Gallery director, said, "Blood is the thing that unites us, that allows a blood donor to save the life of another human. But it can also transmit infection and is attacked by multiple diseases. Our exhibition and events show how blood is a powerful trigger of memory and emotional response."

The exhibition runs until 1 November at the Copeland Gallery, Peckham, London.

Alison Shepherd, *The BMJ*

Cite this as: *BMJ* 2017;359:j4826

CLANCY/SG DUBLIN

OPIOIDS IN AMERICA

Drug poisoning is now the leading cause of death in Americans under 50 years.

Rises in illicit opioid use have followed rises in licit use: in 2013 US doctors wrote 250 million prescriptions for the painkillers—enough for a bottle of pills for everyone.

On these pages Michael McCarthy reports from small town America, at the heart of the epidemic, while on p 97 Bob Roehr pleads against the "hysterical" opiophobia that could leave patients like him in avoidable pain.

On p 98, editorialists Martin Makary and colleagues call on surgeons in particular to prescribe better, and on p 99 Evan Wood and M Eugenia Socías explain the illicit role of the synthetic opioid fentanyl, implicated in huge numbers of deaths, in the overdose epidemic.

DRUG DEPENDENCY

The drug addiction ravaging rural USA

The small town of Port Angeles has the highest rate of opioid overdose deaths in Washington state. **Michael McCarthy** reports from Clallam County

When Angie Gooding returned to Port Angeles, a town of 20 000 people in Washington state at the base of the Olympic mountains, she found that her home town had changed from the one she left 20 years ago. Gooding, who teaches language, arts, and history to 14-15 year olds in Port Angeles's middle school, was not expecting quite so many troubled students.

"Maybe it's because it's a small town and people know each other's business, but I started asking my students questions," Gooding recalls. "I asked: why are you always late for class? Why are you so tired?" The children told her of parents having drug parties on school nights, of syringes in their homes, and of incidents of sexual abuse. "They just opened up and told me what was going on," Gooding tells *The BMJ*.

Like many small towns in rural America, Port Angeles and other communities in surrounding Clallam County have been hard hit by an epidemic of drug misuse that, according to the Centers for Disease Control and Prevention (CDC), led to more than 52 000 deaths in the United States in 2015, 33 000 of which followed an overdose of a prescription or an illicit opioid. The CDC estimates that more than 300 000 Americans have died from overdoses of prescription opioids since 2000.

This prompted US President Donald Trump to declare the epidemic a national emergency in August, but the administration has yet to publish its plans as *The BMJ* went to press.

In a draft report, a commission appointed by the president recommended a public health approach. This included: better access to medication assisted treatment; ensuring the availability of the overdose rescue drug naloxone; enforcing existing legislation that requires insurers to cover substance use disorders

JESSE MAJOR/PENINSULA DAILY NEWS

Hundreds protest in Port Angeles: President Donald Trump declared the epidemic a national emergency but the administration has yet to publish its plans for response

694 people in Washington died from opioid overdoses in 2016, 435 of whom used prescription opioids

as they do physical disorders; and expanding access for inpatient mental healthcare for poor and disabled Americans through Medicaid.

But the US attorney general, Jeff Sessions, has been pushing for federal prosecutors to get tough on drug offenders, seemingly endorsing an approach reminiscent of the law and order "war on drugs" strategy adopted by the US in the 1970s but largely rejected by the Obama administration in favour of policies that put the emphasis on prevention and treatment.

According to latest statistics from Washington state's department of health, 694 people in Washington died from opioid overdoses in 2016, 435 of whom used prescription opioids. The age adjusted opioid related overdose death rate for the state, which now has a population of just over seven million, was 9.3 per 100 000 people. In Clallam County, which has a population of roughly 72 000, 54 died, giving a rate of 16.5/100 000—the worst in the state.

Rise in opioid prescribing

Chris Frank, a family doctor at the community clinic in Port Angeles and the Clallam County health officer, says that although the county's rate is nowhere near that in hard hit regions in the east, such as West Virginia, where in 2015 the opioid overdose death rate was 41/100 000, the root causes are the same: economic decline, social fragmentation, and the rise in opioid prescribing.

Until the 1960s, the rural economy relied heavily on the logging and fishing industries. When thriving, these industries provided good jobs, says Frank, but the work was associated with injuries. As a result, many people were living with chronic pain in the 1990s, when US physicians, at the drug industry's urging, began to prescribe more opioids for non-cancer pain.

"The number of opioid prescriptions has gone up threefold to fourfold over the past 15 to 20 years"
CHRIS FRANK, family doctor

"We saw the same increase in opioid prescribing that other parts of the country saw," Frank tells *The BMJ*. "The number of opioid prescriptions has gone up threefold to fourfold over the past 15 to 20 years." Those increases, he says, were closely linked with an increase in the negative outcomes associated with opioid addiction: broken families, crime, overdoses, and drug related deaths.

Unlike some of the other counties on the peninsula, Clallam County already had programmes and policies that emphasised harm reduction and treatment. It started a syringe exchange programme in 2006, used a special sales tax to fund mental health and drug treatment, and, rather than adding capacity to its jail, had expanded a drug court programme that offers offenders the option of entering treatment instead of serving time.

The community has chosen to stick to that approach, says middle school teacher Gooding, who in 2015 helped found the Port Angeles Citizen Action Network (PA Can) to tackle the town's addiction problems. The network focuses on school interventions, housing for people in recovery, and diverting people from jail to treatment (see box, p96).

One intervention is Clallam public health department's syringe exchange programme, which provides sterile injecting equipment to about 640 drug users and, since

2015, also supplies the opioid agonist naloxone. The exchange, run by David Daran, a community health nurse, maintains an anonymised database for the health department's epidemiological surveillance programme. Kristin Rowland, a co-occurring disorders clinician, joins during clients' visits.

"People come here to get needles. They're not coming to talk to a chemical dependency professional," Daran tells *The BMJ*. "So, it's kind of like a dance, I'll ask them a question about their health and then Kristin will ask them a question about what services they might need."

If they're interested, Rowland can connect them to help with housing or medication assisted treatment. "I'm the Suboxone Jesus," Rowland says, referring to the buprenorphine and naloxone combination used in many opioid treatment programmes. People often need time to accept help after Rowland plants the seed of the idea of treatment, and she gives them a number they can message.

Medication assisted treatment has also become a major focus of the drug treatment efforts at the Clallam County Correctional Facility, where Julia Keegan, a nurse, works as the medical department's health services administrator. Most of the department's work involves treating common chronic diseases such as hypertension and diabetes, but drug addiction is common among the inmates. Most started with prescription opioids, Keegan says: "You can read through their charts and see how they went from prescriptions to heroin."

About three years ago, the medical staff and administration decided they had to act to reduce the number of prisoners who were overdosing after they were released because they had lost tolerance to opioids while in jail. "We'd discharge them, and the next day they'd be dead from an overdose," Keegan says. The jail began offering enrolment in a medication assisted treatment programme at

Misuse and deaths have followed prescribing

According to the US Centers for Disease Control and Prevention (CDC), deaths from overdose of prescription opioids or heroin have quadrupled in the country since 1999, corresponding with the quadrupling of prescription opioid sales from 1999 to 2010. "We now know that overdoses from prescription opioids are a driving factor in the 15-year increase in opioid overdose deaths," the CDC says on its website.

In 2013, US healthcare professionals wrote nearly a quarter of a billion opioid prescriptions, the agency notes, "enough for every American adult to have their own bottle of pills."

The rise in opioid prescription volume began to flatten in 2010 but overdoses related to heroin, which had been rising since 2006, began to accelerate in late 2010, data from the National Poison Data System show. The increase in heroin use may have been prompted by a reformulation of oxycodone to deter misuse and greater availability of potent, cheap heroin. Data from the National Survey on Drug Use and Health show that four in five people who recently started taking heroin reported having previously taken prescription opioids.

In the past few years in Washington state, overdose deaths from prescription opioids have plateaued but deaths from heroin overdose have been on the rise. Last month, it joined more than two dozen states, counties, and cities that have filed lawsuits against drug makers to recoup costs related to opioid misuse, alleging that their marketing to physicians downplayed the risks and overplayed the benefits of opioids for chronic non-cancer pain, contributing to the nation's opioid crisis. The companies deny wrongdoing.

How police involvement helps people in Port Angeles affected by drug use disorders

One of the Port Angeles Citizen Action Network's (PA Can) main activities has been getting the police more involved in efforts to divert people from jail to treatment.

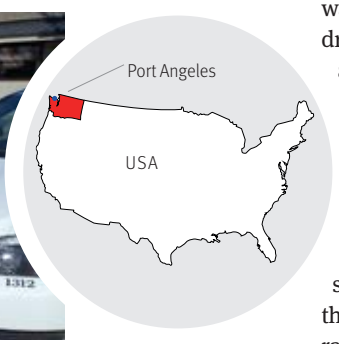
Drug offenders were responsible for a lot of property crime, such as home and car break-ins, says founder and middle school teacher Angie Gooding: "there were a lot of people who were very angry. But there were also people who wanted to address the underlying issues."

The chief of the Port Angeles Police Department, Brian Smith, said he was ready to work with PA Can and other community groups on this approach. Many of the problems his officers saw every day stemmed from drug use.

"I can't think of a single case of property crime since I've been here for nine years that didn't have a nexus to substance abuse," Smith says. "That's the crime people feel around here: burglaries, thefts, identity theft. It's a pretty big quality of life issue."

Before this role, Smith was a special agent for the National Park Service in California. There, the solution to crime was relatively easy: arrest offenders and remove them from the park. "You could arrest your way out of the problem," Smith says—but that's not possible in a community like Port Angeles. "We were literally dealing with the same people over and over again," he says.

Smith says that, working with PA Can and other groups, he came to realise that there was already a wide variety of services—for drug treatment, mental health counselling, and housing—in Port Angeles that could help the police get people with drug and alcohol problems, who may be committing minor offences, off the street and into treatment. What's more, the police were in a good position to help connect this population with these services, says Smith: "We know a lot of the people with these problems. We have rapport with them."



Little town blues: drugs fuel property crime

discharge. Since the programme started early in 2016, about 70 inmates have taken up the offer.

Changing attitudes

Although it's too soon to say whether the town and county's initiatives have significantly reduced overdoses and deaths, Frank, the county health officer, is cautiously optimistic. Access to naloxone and medication assisted treatment is improving, he says.

And Clallam County's medical community is improving prescribing practices. A new state mandated monitoring programme allows doctors to compare their prescribing. The county has no so called "pill mills," run by "sociopathic" doctors who provide opioids for profit, Frank says.

"In a lot of small towns, however, there are doctors who have been there for a long time and haven't had a lot of peer engagement," Frank says. "They may have drifted" into prescribing opioids freely "or they trained during a time when the message was, 'If you undertreat pain you're doing a disservice to your patients.'"

It wasn't so long ago, Frank notes, that you might refer a patient with difficult to control chronic pain on a high dose regimen to a pain specialist and he or she would come back with an even higher dose regimen. "Now we realise that is totally unsafe," he says.

Nevertheless, ending the epidemic will be difficult, Frank adds. When someone becomes addicted to opioids, it becomes the most important thing in their life, he says. But in the Clallam County jail, Keegan says that you can't give up on people using opioids. "They're going to relapse, relapse, relapse, and you're going to see them again and again—but then one day you stop seeing them, and a few months later you see them at the grocery store, with their kid on their hip, living their lives."

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Cite this as: *BMJ* 2017;359:j4730

Read more about the harms of illicit drug use and policy worldwide at bmj.com/war-on-drugs

PATIENT VIEW Bob Roehr

Don't demonise prescription opioids

I use an opioid drug, hydrocodone, every six hours, and have done so for about a decade. I have a lot of company. The latest research, a large government survey with over 50 000 respondents, shows that 92 million Americans used a prescription opioid in 2015, that's 38% of the adult population, few of whom were being treated for terminal cancer. A tiny proportion, just 0.8%, had a drug use disorder.

The paper received scant attention because it did not fit the current framing of the US's overdose problem as a "crisis," with its hysteria redolent of "reefer madness." It has been blown out of proportion by those promoting a war on drugs mentality.

I have chronic pain associated with knee replacement and spinal surgeries. A drug seldom works equally well with all patients. I have been fortunate that, when dealing with chronic pain, hydrocodone works for me with few side effects.

I am as dependent on hydrocodone as I am on the drugs that help manage my blood pressure, or as a patient with diabetes would be on insulin to regulate blood sugar. Hydrocodone has allowed me to remain productive.

That there are few long term data on the effectiveness of opioids at controlling pain does not concern me greatly. Nor has it concerned others to the point that they have procured funding to fully answer the question—it is simply an argument used to oppose the use of opioids.

Fuelled by fentanyl

The surge in opioid related deaths in the US is troubling. But it is important to remember that it is fuelled by street drugs and by fentanyl and its analogues, either alone or laced into a variety of illicit drugs. The argument that prescription opioid use leads to addiction is the old "gateway effect" that has been trotted out and debunked before—marijuana use leads to heroin use, a beer leads to chronic alcoholism. It is no more valid for prescription opioids than it was in those earlier examples.

There are serious methodological problems with the Centers for Disease Control and Prevention report on opioid deaths.[3] It combined deaths from (illegal) heroin with deaths from (legal) prescription opioids. But its data clearly show that deaths from only prescription drugs have tailed off over the past few years. The increase in deaths is from heroin and street drugs laced with fentanyl.

Opioid policy has been driven by an attempt to control the supply—through legal prosecution of physicians running "pill mills"; by tightening prescribing criteria and the auditing of prescriptions; by limiting prescriptions to 30 days; and through the introduction of tamper resistant formulations that make misuse more difficult. All of these measures were put in place before the recent surge in opioid associated deaths. Little has been done to reduce demand by improving the availability and quality of addiction treatment.


The framing of the epidemic as a "crisis," has hysteria redolent of "reefer madness"

People who have lost access to prescription opioids have turned to cheaper, more accessible, and more potent black market options, according to experts, and the death toll has soared. That pattern is the same one seen in alcohol prohibition in the US a century ago.

Our preoccupation with opioid misuse could blind us to the good that these drugs can do, and may mean that more people will unnecessarily endure suffering that might otherwise be alleviated.

Yes, some people misuse prescription drugs, just as they would likely misuse another drug if opioids were not available. But fear of dependence will lead physicians to deprive responsible patients of access to opioids and drive them to seek relief through drugs on the streets, where unregulated products often contain fentanyl and the spectre of death. Demonising prescription opioids can come to no good end.

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Cite this as: *BMJ* 2017;359:j4727

DRUG DEPENDENCY EDITORIAL

Overprescribing is major contributor to opioid crisis

The epidemic is a self-inflicted wound that we will not be able to cure unless surgeons and other physicians change their behaviour

Public health crises come in two forms—those resulting from naturally occurring diseases and those that are the byproduct of medical care itself. The opioid crisis is the latest self inflicted wound in public health. In the US alone, there were 240 million opioid prescriptions dispensed in 2015, nearly one for every adult in the country.[1] To tackle the opioid epidemic, we must first tackle a major contributor—overprescribing.[2]

Too many people leave hospital with bottles of opioid tablets they don't need. Consider a standard elective laparoscopic cholecystectomy. Some doctors prescribe opioids judiciously after the procedure—providing only non-opioid alternatives or up to five opioid tablets in combination with non-opioid alternatives. Other doctors routinely overprescribe—giving every patient 30-60 highly addictive tablets. Most commonly this is oxycodone written with instructions to take 5-10 mg as needed every 4-6 hours for pain. But if patients follow these instructions, they will be taking up to 90 MME (morphine mg equivalents) a day—nearly double the threshold above which the US Centers for Disease Prevention and Control cautions a twofold increased risk of overdose (≥50 MME/day *v* <20 MME/day).[3]

Unfortunately, electronic health records further engrained this pattern as it was set as a default in e-prescribing. For example, when a user types oxycodone in the prescribing section of the electronic medical record, 30 tablets appears as the default even though most

patients need fewer than 10 or can be comfortable with non-narcotic options.[4] Changing the default is one easy step all medical centres should adopt to address the opioid epidemic.

Using 2016 US Medicare data, our Johns Hopkins team analysed the average number of opioids a doctor prescribes after a routine laparoscopic cholecystectomy, excluding patients with pre-existing opioid use or pain syndromes. Prescribing patterns ranged from 0 to more than 50, with only about a fifth averaging what

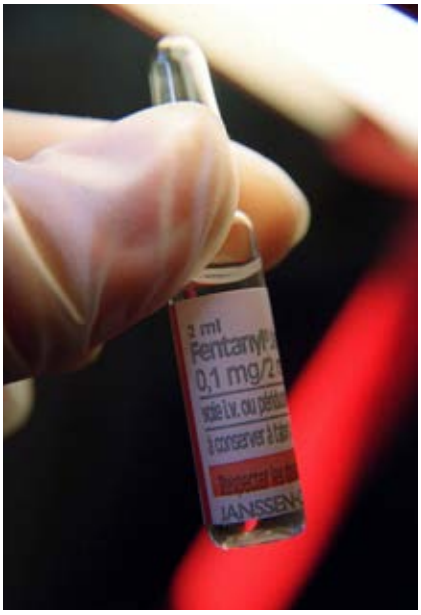
EDITORIAL

Epidemic of deaths from fentanyl overdose

Another serious side effect of the war on drugs

Strategies to tackle the harms of substance misuse and addiction remain among the most controversial areas in public policy.[1 2] Although new ways of thinking are emerging, the overwhelming model in the past century has involved the criminalisation of production, sale, and possession of illicit drugs.[1 2] This is despite a large body of research showing that this approach has not only been unsuccessful in decreasing the availability and use of drugs, but has also had numerous severe unintended negative public health consequences, including increased health harms, incarceration rates, and violence in the drug market.[1 2]

History has also shown repeatedly that the emphasis on criminalisation



Deaths in the US from fentanyl overdose rose from 2628 to 20 145 in four years

often results in the emergence of more potent and potentially toxic drugs.[3] Such behaviour was observed in the US during alcohol prohibition and with the criminalisation of opium, which prompted a shift from smoking to more potent forms of opioids and riskier use, including injection.[3] To make matters worse, it is impossible in unregulated markets to control the potency and composition, or prevent contamination of the drugs.

The latest example of the failure of a law enforcement approach is the emergence of highly potent synthetic opioids (illicitly manufactured fentanyl and analogues such as carfentanyl). Overdose deaths involving fentanyl have risen alarmingly: in the US from 2012 to 2016, the number of deaths

Over the past few decades, opioid prescribing has been driven little by science and mostly by tradition and dogma

Johns Hopkins' pain specialists call the best practice range (≤10 tablets).

We have replicated the analysis for many common procedures, including those that can be managed with non-opioids alone. Consistent with current literature, the physician distribution graphs keep showing wide variation in opioid prescribing.[5] Physicians who are outside of the data boundaries of reasonable variation for standardised procedures, as set by our hospital's pain specialists, are easily identifiable.

Changing behaviour

Now that we can identify outlier overprescribing clinicians, what do we do about it? Using the Improving Wisely model of sharing data reports with doctors, showing them where they stand relative to their peers, we can identify doctors who need guidance to prescribe more wisely and reduce unwarranted clinical variation in opioid prescribing.[6]

In healthcare, there is science, tradition, and dogma. Over the past few decades, opioid prescribing has been driven little by science and mostly by tradition and dogma. The trend to overprescribe is based on an experiential "that's how I like to do it" model passed from generation to generation of trainees. This dogma was solidified by a 1980 *New England Journal of Medicine* letter,[7] long since discredited,[8] which stated that only 1% of people become addicted to narcotic pain medication. Aggressive advertising of opioids quickly ensued.[9]

Another iatrogenic factor driving overprescribing is the notion that pain is the fifth vital sign of medicine. This concept was dominant in the mid-1990s, and it became an indicator of patient satisfaction and hospital performance in the mid-2000s.[10-12]

The many doctors who prescribe opioids judiciously recognise the drugs' addictive potential and reserve them for their true indications: terminal cancer, second degree burns, and major surgery, for example. Sadly, a consumerist mentality of patient satisfaction and pain-free expectations has resulted in opioids being prescribed for soft indications such as simple procedures, back pain, and chronic joint pain rather than reserving them for persistent pain, despite non-narcotic treatments.

Improved education is needed for both physicians and patients on the proper role of opioids.[13 14] We need to return to sound medicine and employ wise prescribing strategies. Feeling zero pain is an unrealistic expectation during recovery. Multimodal postoperative pain management should be the standard of care, with opioid medications used adjunctively.[15]

In the past, we surgeons were taught that opioids were not addictive. But today, science has taught us that the opposite is true.[16 17] In fact, one in 16 surgery patients becomes a chronic opioid user.[18] After chronic pain specialists, surgeons have the highest rate of opioid prescribing in the US, and recent data show that 70-80% of prescribed opioids go unused after common surgical procedures.[5 19] This can lead to stockpiling and use for non-prescribed indications by the patient or others. While better access to opioid addiction treatment is essential, we should remember that the most effective treatment is still prevention.

Cite this as: *BMJ* 2017;359:j4792
Find the full version with references at http://dx.doi.org/10.1136/bmj.j4792

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associated with synthetic opioids rose from 2628 to 20 145.[4] Large increases have also occurred in Europe, including the UK.[6]

The epidemic of fentanyl related overdoses could be argued to be a predictable consequence of efforts to cut the supply of opioid analgesics and heroin without also addressing the needs of those who are dependent, or the many social drivers of the crisis.[3] Likewise, continued over-reliance on law enforcement approaches is unlikely to curb the epidemic and could shift the market towards more potent synthetic analogues.[3 7]

Public health solutions

To tackle the crisis, innovative, science driven public health solutions are urgently needed. An accessible and evidence based addiction treatment system that supports individuals along a continuum of care is vital.[8] Treatment type and intensity (ranging from oral to injectable medications) should be adjusted to match individuals' needs over time.[9] Few jurisdictions currently have such a system in place.

Policy makers must tackle the social determinants that fuel the marginalisation of drug users

Since many people at risk of overdose are recreational users rather than dependent users in need of treatment, another potential strategy is drug testing services. These allow people who use drugs or are otherwise involved in the drug economy to test illicit drugs and change their practices based on the results (by reducing the amount, for example). Although some experience supports the role of drug checking for recreational users of stimulants and MDMA (ecstasy),[10] its role in opioid use requires urgent evaluation. Involving the affected community in the planning and implementation phases of any strategy will also be key to reaching those most at risk. Past work has shown that peers can extend the reach of conventional harm reduction strategies.[11]

However, the rapid growth of the crisis related to fentanyl is likely to continue unless policy makers also tackle the many social determinants that fuel the legal and socioeconomic marginalisation of drug users and create barriers to evidence based interventions.[1] Most importantly, policy makers must understand the crisis is a consequence of prohibition and that long overdue out of the box thinking can improve public safety and public health by treating substance use as a health problem rather than a criminal or moral issue.[9 12]

Cite this as: *BMJ* 2017;358:j4355
Find the full version with references at http://dx.doi.org/10.1136/bmj.j4355

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EDITORIAL

State of health and care in England

Services are at full stretch and struggling to maintain standards

The annual assessment of health and social care by the Care Quality Commission (CQC) provides a veritable treasure trove of information about the state of services in England.[1] Based on inspections of 21 256 adult social care services, 152 NHS acute trusts, 197 independent acute hospitals, 18 NHS community health trusts, 54 NHS mental health trusts, 226 independent mental health locations, 10 NHS ambulance trusts, and 7028 primary care services over three years, the assessment offers grounds for concern and reassurance in equal measure.

The CQC's headline finding is that most services are good and many providers have improved the quality and safety of care since inspections. Behind this headline lies a much more nuanced assessment, with variations between and within services and evidence of growing pressures on staff and deterioration of quality in some services. Adult social care is identified as a particular concern, with a reduction in nursing home beds, providers of domiciliary care handing back contracts to dozens of local authorities, and an estimated 48% increase in the number of older people not receiving the help they need since 2010.

The CQC argues that health and care services are working at full stretch and that staff resilience is not inexhaustible. It is hard to escape the conclusion that standards in many services are likely to fall in future as a result of continuing financial pressures. Support for this view can be found in evidence by Simon Stevens, chief executive of NHS England, to the House of Commons Health Committee on the day the report was published. Stevens warned that low levels of funding growth for the NHS in the next two years would result in deteriorations in care, a reminder if one were needed of the dangers that lie ahead.[2]

The challenge for the NHS arising from CQC's assessment is to learn lessons from the experience of NHS trusts that are performing well even in the face of financial and operational pressures. According to the CQC, the characteristics of acute hospital trusts that have improved care include strong leadership, engaged staff, cultures that empower staff to improve care, a shared vision, and an outward looking approach. There is more work to do to embed these characteristics in all NHS providers to ensure that patients receive the best possible care.

A sustainable future

The challenge for the government is to find a sustainable solution for the future funding of adult social care, described by the CQC as "one of the greatest unresolved public policy issues of our time." The promised green paper on adult social care provides an opportunity to tackle this problem if the will exists within the government to examine all the options and to move beyond the sticking plaster solutions like the Better Care Fund that have so far failed to deliver.[3] A good starting point is the report of the Barker Commission, which laid out the hard choices on tax and spending that need to be confronted in securing sustainable funding for the future.[4]

Adult social care "one of the greatest unresolved public policy issues of our time."

The challenge for CQC is to use the intelligence and understanding it has acquired to support improvements in care and not just to hold up a mirror to how services perform now. It also has more work to do to assess the performance of local systems of care as well as the organisations providing care. Its observation that high quality care is delivered when services are joined up around the needs of people reinforces the importance of work to integrate care through implementing the NHS five year forward and sustainability and transformation plans.[5]

Continuing to give priority to the development of these new care models will not be easy when so much management and clinical time is focused on reducing financial deficits and meeting waiting time targets. The CQC's warnings about the perilous state of some services could have the unintended effect of strengthening the focus on these operational matters at the expense of work to transform care. Securing the future of health and social care depends on doing things differently, not doing more of the same a bit better, and leaders at all levels have a responsibility to make sure this happens. This must include providing additional funding to sustain services while options for the longer term are explored in work on the green paper.

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Cite this as: *BMJ* 2017;359:j4799

Find the full version with references at http://dx.doi.org/10.1136/bmj.j4799