Funding for Yale Cancer Answers is provided by Smilow Cancer Hospital. Welcome to Yale Cancer Answers with your host Doctor Anees Chagpar. Yale Cancer Answers features the latest information on cancer care by welcoming oncologists and specialists who are on the forefront of the battle to fight cancer. This week, it’s a conversation about ambulatory care for vulnerable populations with Doctor Joseph Ross. Doctor Ross is a professor of medicine and of public health at the Yale School of Medicine, where Doctor Chagpar is a professor of surgical oncology. So you know, maybe we can start off by you telling us a little bit more about yourself and what it is that you do. Sure, the vast majority of my time is spent doing research. I do what’s called health services or health outcomes research. Thinking about areas in which we can improve healthcare delivery for patients and populations. I also have teaching roles and clinical roles. I Co lead a fellowship program here at Yale and I see patients.
Both in the hospital and in our primary care clinic. So you know that the term health services research is one of those that gets bantered around quite a bit, and I. I think that for a lot of people it’s still kind of fuzzy in terms of what exactly that means. Can you shed some light on what exactly your research entails?

Sure, I think that the term the best way to think about health service research as a term is that it essentially means clinically oriented epidemiology research. So I was trained as a physician and learned, you know, the basics of, you know, internal medicine over three years of training, and then I did a fellowship program. In which I learned how to do clinical research using large data sources. And so I learned the kind of basics of biostatistics quantitative methods.

Working with data as well as other aspects of clinical research, including qualitative research, survey methods, and all the like. But for the very early parts of my career, what I mostly did was leverage. Either data that comes from
hospitals or insurance plans, what’s called claims data, or other survey datasets that are collected by the US government to try to understand how we can deliver. Healthcare better or identify patients who aren’t getting the services they need. So for instance, as examples I did one of my very first projects that I ever did was to look at whether individuals with higher incomes are more likely to receive cancer preventive care services as well as other chronic disease management services like care for diabetes or care for cardiovascular disease and the reason we were looking at that question is because we wanted to know. Whether high income mitigates the relationship between having insurance and not because, you know, obviously not having insurance puts people at risk for not getting the care that they need. So this is just an example of a health services research question looking at large data sources to try to better understand, kind of who’s at risk for
falling through the cracks.
So that leads to the obvious question, what did you find in that research project?
Are high income people more likely to follow screening guidelines?
Yes, actually. So this question was prompted by at the time 15 years ago, all of the policy discussions too.
Put money into what’s called health savings accounts that patients could then use to obtain the care that they need. Right? That I don’t.
I don’t want to go down the rabbit hole of what a health savings account or is,
but essentially what we wanted to know is if people had discretionary funds at their disposal,
would they use it to obtain the appropriate health care services that they were due for?
What we found? Not surprisingly, is that people with higher incomes were far more likely to get preventive care services cancer care. Diabetes care cardiovascular care as I said, but that the that greater income did not necessarily mitigate the gap that you see between people who are insured and uninsured. So if you had uninsured people with a lot of income or wealth,
they didn’t necessarily obtain services at the rate that those people with insurance and also those high incomes did. So it’s we still identified this important gap, which raised concerns about whether people would use their kind of, you know what would be considered discretionary income appropriately? To get health care services that they might need, yeah. I mean it. It certainly raises questions even now, in the current policy environment where you know people are bantering about you, know will be a universal basic income as something that we might want to do that could improve quality of life for people who are at lower incomes. Things like expanding health care insurance and whether one or both of these potential policy interventions might make a difference for cancer Care now that we know that for the most part, screening is is offered under things like the Affordable Care Act. Do you think that either of these?

It will make an impact in terms of getting screened and after screening, it will make an impact in terms of.
yeah, those are both great questions. I mean what all of the policy literature is consistently demonstrated is that people who are uninsured are far less likely to get care of that they need, particularly cancer preventive services, where things you know kind of kick in down the line because of other other things in the cost of the care. We know that you know just the Affordable Care Act in itself through the expansion of Medicaid led to great inroads and much increased rates of cancer prevention services. Among people who had been previously uninsured, so we we know as a policy, you know, expanding Medicaid providing health insurance is effective. The question of the universal basic income I think, gets at you know all of the other challenges that individuals face, particularly individuals of lower means to obtain care. Taking time off from work. The transportation to get to the hospital. This you know, the expenses of you know making sure that someone is there to provide childcare or eldercare.
you know if you as an individual are providing those services. So you know the safety net in the US is not strong and we do need to think about ways to enable people to get the care that they need. You know one other. One of the questions, especially in the states that have not expanded Medicaid. There's. And perhaps one of the reasons why they haven't is the question of, well, what? What are the ramifications to the rest of society? Because if we you know, try to provide a universal basic income where we try to provide universal health insurance or other. City social safety net kind of provisions. Essentially somebody's got to pay for that, and so people often use that as an argument against those kinds of policies. Has anybody looked at the ramifications in terms of the overall cost to society? In other words, if people actually did get earlier cancer care which tends to be more cost effective than getting cancer care at the end of life when it really you don't get as much bang for your buck, the ramifications on society as a whole, and whether these kinds of policies
in fact may be cost effective.
It’s a really interesting question, you know, and I think you can think about it in two ways. Sort of like what’s cost effective versus kind of what’s morally ethically right.
There was a faculty member at Yale for a number of years named Elizabeth Bradley, who did a lot of work trying to understand across countries. When you look at social safety nets and broaden it to even look beyond. Healthcare to education and other caregiving services and you know elder care and you know. Nurses, nursery school and all of those different things that a society can provide to its citizens. And you add up all the costs and look at the associations with life expectancy. Or you know years of healthy living. You know the US consistently comes in the middle to the lower part of the pack, right? We spend a lot on healthcare. We spend very little on the kind of pre healthcare social care services that can lead to a healthier population and then we get stuck.
You know disease care. You know when when when things are a little bit too far gone you could say. Who knows, I would say if it’s truly cost effective, but we do know that there are other models out there that lead to a, you know, a population or in communities that are generally healthier and happier, you know, we all have to allocate resources. There’s not an infinite budget, but you know, you could argue that there are better ways to allocate the amount that we’re spending today. I mean I was getting to to that kind of point, which is if you look at how much we expend on health care and any metric that you want to look at in terms of health care, whether it’s you know even things like infant mortality rate, like you know infant mortality rate, which you would think in the US should be pretty darn good. My understanding is that whether you look at infant mortality rate or you look at other other aspects of health. We don’t do so well and yet other countries who spend less do better.
So you wonder whether that makes the argument that we could be doing better as a society in terms of restructuring how we spend our dollars. And getting more bang for our buck. Has anybody kind of done any experiments to see whether in fact in a microcosm we could look at that, and whether that actually plays out? I'm thinking of things like, you know the Oregon experiment for example. Yeah, I mean the Oregon experiment is a great experiment in terms of rolling out and actually testing the impact of Medicaid. Eligibility, broadening eligibility and making people you know signing them up as beneficiaries. The broader you know other services. You know how we compare to other countries that I don't know is ever been tested and those are things that are very difficult to test, which is why economists health services researchers are constantly trying to leverage large data sources to gain insights. In this way, you know that I that I described with that very first study that I did the Oregon experiment, though, it really nice example of.
You know, as Medicaid eligibility was being expanded, they were randomizing individuals you know to get it or not get it essentially and looking at the impact on, you know, population, health type metrics and of course. I think not surprisingly, found that people were more likely to get different. You know, ambulatory care services like cancer prevention type services. They were, you know, they did better in terms of other outcomes, although they also used care more, which you know. I think some people questioned whether that meant you know. If just by providing health insurance that leads people to to solicit care, and on some level that’s probably true, people have unmet needs when they’ve been uninsured for a while. You know the investigators who led the Oregon experiment are still following out data now years later to understand its impact of providing insurance to people who heretofore had and had it. I mean, I think that the whole question
moral hazard comes in in terms of, you know, if you give people free healthcare free into quotes, healthcare that they tend to use it more, but one wonders well if you’re using it more, but you’re using it on preventative health and and. Kind of nipping in the bud problems that could be far more costly in the future, whether that in the long run actually makes more sense in in terms of, you know, getting the best bang for your buck, you know. Similarly, I understand that there have been some all be it kind of grassroots experiments going on on the West Coast looking at Universal basic income to see whether a provision of universal basic income can actually improve outcomes. Any data that you know of in terms of how that might affect health care in those populations. Well, you know what I would think it would help the most. And many of the copayments are our health care systems imposes on patients, right? So you know, for every prescription that somebody picks up, there’s a copayment.
You know, for every doctors visit, there's a Co payment you can imagine as people you know farther down the income scale. People who are less well off and more vulnerable to. You know, unexpected costs in their day-to-day life.

Having you know a quote, UN quote, you know basic income can can mitigate some of the challenges in obtaining. You know, relatively, patients who are you know, newly insured when there's a lower cost burden to obtain care. They're more likely to, you know, go out, go and get services. Some of it's going to be needed. Some of it may be considered, unnecessary, some of it may be just sort of pent up.

But I think as a health care system, we also need to look ourselves in the mirror. There are, you know,
It’s not just on the patients, you know who who who may not have the expertise that we as clinicians have when making a decision about whether to, get a test or or or.

You know,

get a prescription for a drug

absolutely couldn’t agree with you more, and we’re going to pick up that conversation right after we take a break for a medical minute.

Please stay tuned to learn more about access to care with my guest.

Doctor Joseph Ross.

Funding for Yale Cancer Answers comes from Smilow Cancer Hospital, where the breast Cancer Prevention Clinic provides comprehensive risk assessment, education and screening for women at increased risk of breast cancer.

To learn more, visit yalecancercenter.org/ genetics.
It's estimated that over 240,000 men in the US will be diagnosed with prostate cancer this year, with over 3000 new cases being identified here in Connecticut. One in eight American men will develop prostate cancer in the course of his lifetime. Major advances in the detection and treatment of prostate cancer have dramatically decreased the number of men who die from the disease screening can be performed quickly and easily in a physician’s office using two simple tests, a physical exam, and a blood test. Clinical trials are currently underway at federally designated Comprehensive cancer centers such as Yale Cancer Center and Smilow Cancer Hospital, where doctors are also using the Artemis machine, which enables targeted biopsies to be performed. More information is available at yalecancercenter.org you’re listening to Connecticut Public Radio. Welcome back to Yale Cancer answers. This is doctor Anees Chagpar and I’m joined tonight by my guest doctor Joseph Ross. We’re learning about obstacles when it
comes to access to care for vulnerable populations and specifically why it is that the US health care system spends so much money on health care and yet the outcomes that we have. Don’t really match up to that, right before the break, Doctor Ross you, you made a really good point, which is that. It’s not just on the patient, it really is a number of things within the system that increase cost. So it’s not just how much health care a given patient uses. But the overall cost of the system itself, one area where costs can be quite exorbitant is in the cost of drugs, and I was hoping that you could kind of talk a little bit about how it is that drugs get approved. I understand that you do some work looking at the FDA and how how long they’re on patent before they become generic and the loopholes around that.
And how the prices of these drugs are actually set?

In other words, do we get the same bang for our buck or are we being cost effective in terms of buying these medications?

So I guess this conversation is gonna go on until morning is that the plan if I’m gonna answer all those questions in one and describe the all the various loopholes and market exclusivity periods. It’s a Byzantine maze like, you know, set of rules and regulations that govern all this.

But I’ll try to sum it up and keep it simple when it comes time for, you know, a drug sponsor or manufacturer to bring a drug to market. You know they they run through a series of steps.

In alignment with the FDA, you know they they run some premarket clinical trials. Usually testing you know first on animals later on humans, they’re looking to make sure that the drug is not toxic.

Not going to cause you know allergic reactions that cause you know really severe problems once they have sort
of past those hurdles and they
you know they have a compound that
they are ready to test in humans,
they start running clinical trials.
Some of them are what’s called phase
two clinical trials. These are.
Generally,
a bit smaller trials in patients
with the disease,
and those are essentially geared
towards helping to inform what are
called pivotal clinical trials.
The really big kind of what are
called phase three trials that
demonstrate that a drug is safe and
effective for use ’cause those are
the standards that the FDA uses.
Essentially, you know,
two or more clinical trials that
demonstrate the safety and
effectiveness of the drug once it
passes that hurdle in the drug
is approved for use by the FDA.
It’s available and on the market,
and sometimes what.
I guess the way to think about it and
and the implications for pricing and
how our country differs from others is,
you know,
that drug is available for use,
the manufacturer sets the price.
They can set any price that they want, and that drug is then sold, you know, through the channels working with health insurance payers or Medicare that you know makes a decision about whether to cover the product. And that it’s placed on a formulary. And when a patient goes to obtain that drug, there’s usually a copayment anywhere between you know, $5 for a cheaper drug to 20% of the cost of the drug. You know, anywhere between you know, for more expensive specialty drugs in the United States, depending on the type of drug it is, and you know the various pathways that went through in the FDA to get approval, market exclusivity, can you know, range anywhere from? Five years to 12 years and by that term I mean the time before which generic competition can take place. So there’s really, you know, unfettered. No competition. You know, the company is selling is the only manufacturer of the drug for a long time. They can raise the price. They can double the price.
They can do whatever they want over that time period, and then once a generic is available on the market. Usually what we see is that until 2.3 maybe even four generic manufacturers are making the same product. The price doesn’t drop substantially and you know, once there’s three or more, the price is usually 90% of whatever what was charged. But you know, for a long time before that, prices are very high. This differs from pricing in other countries where you know, for instance, in Europe, once the drug is approved by the European Medicines Agency, then each country makes a decision. As to how much they’ll pay for it, and that decision is based on the evidence that’s presented as part of the clinical trial data that support its use, they do something that are called cost effectiveness analysis where they determine essentially the quality adjusted life year benefit of the drug they use that you know the expected benefit to set the price, and then they negotiate with the company to, you know, to essentially pay for the value they are receiving.
That never happens. In the US, you could have a drug that costs $50,000 a year. That saves a person’s life. It may be, you know, 80% reduces the death from a particular cancer by 80%. Everyone wants to pay for that drug. It’s great value even though it’s expensive. You could also have a $50,000 year drug that has a marginal impact and you, but you pay the same price because the company is the kind of setting the terms so in the US price is unconnected to value, whereas in a lot of the world it is. And I think that we would be much better off. As a healthcare system, broadly and as a society more narrowly, if we tried to better incorporate expected value into these equations for what we’re going to pay, I think you know we in the United States, you know the general societal mindset is we’re willing to pay for therapies that are life changing and extremely beneficial. The problem is that lots of things are not, but they get advertised and promoted very heavily such that people believe them. To be more effective than they actually are.
Yeah, and I think that you know health care is one of these spaces where it's really difficult because there is an information asymmetry between the consumers and the providers. And the thing is that it is so important, right? People will say I will pay anything for my health, except they may not know how much benefit they're actually getting because of this information asymmetry, because they don’t know what they don’t know. Is that right?

Absolutely, and you know, this is particularly challenging when you know clinical conditions are, you know, kind of dire, right?

Where there’s patients trying to make a decision? Or worse, their family.

You know, trying to make a decision about what to do for a patient, you know who perhaps, had a metastatic cancer. Just as an example, right?

And you know, should we try that last chemotherapy?

Well, that you know that last chemotherapy you know costs, you know 20%. You know of that, you know that prices is borne by patients,
and you know how to pay for it.

You know, we know that medical care is the most common reason for bankruptcy in the United States. Because you know,

people just spend spend. Money that they don’t have and you know, bear the consequences.

And if we could have better conversations around anticipated benefit, you know this. This chemotherapy, you know, the likelihood of it extending your loved ones life more than six months is X.

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As a clinician I have to recommend you don’t pursue it as opposed to the likelihood is you know, you know, we think 50% that they’re going to live longer than six months.

With this chemo. It’s worth it.

You know this this is is the kind of thing we should be spending money on, but all the more makes me so frustrated that we’re putting patients in their families in these decisions.

You know, in the position to have to make these decisions now, how much money can they spend, right?

You know that it’s just inherently unfair,
because lots of people don’t have the.

Money to the resources to spend

and even people who are insured.

You know there is a a layer of

some would call it protection.

Some would call it bureaucracy in

terms of will the insurer pay for,

you know drug X if it’s on a

formulary or test X or procedure X,

all of which tend to be very

expensive and all of which have

varying degrees of benefit.

Relative to risk varying degrees of

evidence that backs up their efficiency,

which then raises the question you

know so often I find people paint

insurance companies as the quote bad guy,

they wouldn’t approve my test

without looking at.

Well, maybe that’s because they’re

looking at evidence based guidelines that

would recommend against those tests.

So when you do country comparisons,

mean people often look at.

Countries like the UK or like

Canada where there is a system of

universal healthcare in the UK.

It’s still a bit too tiered,

but under the NHSA universal system.

But they have something like

Nice which sets provisions based
on evidence based guidelines.
So what are your thoughts about that in terms of the US system, it doesn’t seem that we really have a robust means of communicating that evidence. Based guidance to patients.
Yeah, we have no system in place that does.
You know what’s considered? Kind of health technology assessments like Nice does, which is looking at the sort of what the bang for the buck.
You know what? What are you? What is the expected benefit? How safe is it and what?
How much are we going to pay for it? And I don’t want to paint, you know, in a naive picture of, you know, care in the UK or care in other countries in the United States we have remarkable proficiency at providing.
Highly specialized quote, UN quote, very expensive care. Sometimes that’s great and sometimes it’s, you know it’s. It leads to these challenging.
You know cases that we’re talking about where people are being provided care that they may not need, but on the other side of the coin.
You know when there are,
You know various restrictive budgets in place. You know you can have people who may benefit from care, not receiving it because of the rules and regulations, and so each set of each system you know could stand to have some improvements. I mean, what you’d really like to see is a UK based system with US like funding, right? And maybe it doesn’t need to be quite as much as we spend on healthcare now, but you never want to see a patient who’s responding well to chemo. Kind of. Hit their 24 month limit, which you commonly see in countries like the UK and others who may continue to still be good responders you know, so there’s ways that both sets of systems can be improved. We can be learning from one another towards a more perfect system, and right now there’s there’s lots of room and opportunity for improvement. Doctor Joseph Ross is a professor of medicine and of public health at the Yale School of Medicine. If you have questions,
the address is canceranswers@yale.edu
and past editions of the program are available in audio and written form at Yale Cancer Center Org.
We hope you’ll join us next week to learn more about the fight against cancer here on Connecticut Public radio. Funding for Yale Cancer Answers is provided by Smilow Cancer Hospital.