

Embracing a Unified Universal Healthcare System: The Expanding Medical and Behavioral Resources with Access to Care for Everyone (EMBRACE) Healthcare Plan



On Behalf of *Healthcare Professionals for Healthcare Reform*

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Introduction

EMBRACE (The Expanding Medical and Behavioral Resources with Access to Care for Everyone) is a comprehensive plan for true healthcare *system* reform that goes beyond financing mechanisms (insurance and taxes). It addresses key issues needed to make the health system in the United States perform more efficiently and effectively, while assuring that everyone has access to evidence-based healthcare.

Part 1: The Proposal

EMBRACE is founded on three principal innovations that are designed to work together: An evidence-based 3-tiered benefits system; a web based, nation-wide Health Information Platform (HIP); and an independent National Medical Board (NMB) that would oversee the entire United States' Healthcare System (USHS) - and collectively create a 'unified healthcare system' with universal coverage.

The Tiered Benefits System

The evidence-based Tiered Benefits System, a main pillar of EMBRACE's infrastructure, is comprised of three levels:

- **Tier 1** (the basic level) applies to all conditions that have been determined to be life threatening, all services that have been shown to be life extending and all therapies that have been shown to prevent life-threatening conditions.
- **Tier 2** applies to all conditions that have been shown to affect quality of life, therapies that have been shown to improve these conditions, and services and therapies for Tier 1 conditions that lack the scientific evidence required for Tier 1 coverage.
- **Tier 3** applies to "luxury" services as well as other conditions not covered in Tiers 1 and 2.

The determination of the conditions and therapies covered by each of the tiers would ultimately be made by the National Medical Board (NMB), a nongovernmental agency that is discussed below, and will be based largely on scientific studies and published medical guidelines.

Consequently, it is difficult to predict all of the conditions that might be included in each of the tiers. However, based on some of the current published evidence and guidelines, some reasonable conjectures can be made.

Tier 1: Examples of conditions covered under Tier 1 would most likely include acute myocardial infarctions, cancer, pregnancy, and severe depression. This tier would also likely include treatment of conditions that have been shown to increase the risk of developing life-threatening illnesses, such as hypertension, diabetes, and hyperlipidemia.

In addition, this tier covers all testing used to rule in or rule out a Tier 1 condition. For example: if a patient presents to the emergency room with chest pains, Tier 1 covers any of the scientifically validated tests performed in the workup until a Tier 1 condition (like a myocardial infarction) is diagnosed or definitively excluded. Any other testing would fall under Tier 2.

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Tier 2: Conditions covered by Tier 2 include those that may significantly affect quality of life but that have not been shown to affect life expectancy or increase the risk of other life-threatening conditions. These might include osteoarthritis, low back pain, and irritable bowel syndrome. In addition, this tier covers therapies for life-threatening conditions and work-ups that still require scientific proof of efficacy in order to be covered in Tier 1.

Tier 3: This tier is reserved for “luxury” treatments and procedures that have little or no scientific evidence of reducing mortality or improving quality of life, such as facelifts and LASIK surgery.

The main reason for creating benefit tiers is to determine coverage. Unlike single-payer systems, EMBRACE allows both public and private insurers to participate. But unlike the present system in the United States, EMBRACE defines the services to be covered by each payer type. Because Tier 1 conditions are the most serious in terms of both personal and public health, they are covered by a form of public insurance. This coverage is automatic and universal and does not depend on age, gender, employment status, preexisting conditions, or even military service; it covers the entire population from cradle to grave.

Tier 2 is covered by private insurance or paid out of pocket. Consumers who want Tier 2 coverage can purchase it through a computer-based program modeled after the successful Medigap menu of plans. Medigap (private health insurance plans sold as a supplement to traditional Medicare) has been working well since its introduction in the early 1990s. Its menu allows the consumer to easily compare the features of the various plans available. Table 1 is an example of the Medigap menu.

Table 1. Comparison of Medigap plans

Medigap benefits	Medigap plans									
	A	B	C	D	F	G	K	L	M	N
Part A coinsurance and hospital costs up to an additional 365 days after Medicare benefits are depleted	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Part B coinsurance or copayment	Yes	Yes	Yes	Yes	Yes	Yes	50%	75%	Yes	Yes
Blood (first three pints)	Yes	Yes	Yes	Yes	Yes	Yes	50%	75%	Yes	Yes
Part A hospice care coinsurance or copayment	Yes	Yes	Yes	Yes	Yes	Yes	50%	75%	Yes	Yes
Skilled nursing facility care coinsurance	No	No	Yes	Yes	Yes	Yes	50%	75%	Yes	Yes
Part A deductible	No	Yes	Yes	Yes	Yes	Yes	50%	75%	50%	Yes
Part B deductible	No	No	Yes	No	Yes	No	No	No	No	No
Part B excess charges	No	No	No	No	Yes	Yes	No	No	No	No
Foreign travel exchange (up to plan limits)	No	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes
Out-of-pocket limit	N/A	N/A	N/A	N/A	N/A	N/A	\$4,940	\$2,470	N/A	N/A

Note: “Yes” means the plan covers 100 percent of a benefit. “No” means the plan doesn’t cover that benefit. “Percentage (%)” means the plan covers a percentage of the benefit. “N/A” means a certain plan is not applicable.

Source: Centers for Medicare and Medicaid Services. n.d. “How to Compare Medigap Policies,” <https://www.medicare.gov/supplement-other-insurance/compare-medigap/compare-medigap.html>.

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The rows in Table 1 represent specific features contained in the various insurance plans listed in the columns. For example, if you want a comprehensive program that covers each row, you might choose plan F; plan A offers bare-bones coverage. Once consumers have chosen the plan that best suits their needs, they can check, on a linked menu, which insurance companies offer the plan and the range of premiums. No other method of purchasing private health insurance in the United States allows the consumer to compare features and prices as well as Medigap.

EMBRACE would offer a similar menu of private insurance offerings for those consumers who want to supplement their automatic Tier 1 coverage. Instead of the supplements to Medicare insurance, this menu would list features of Tier 2 coverage. The ability to compare plans side by side would allow consumers to first find the best Tier 2 plan for their needs and then to find the best price. As with Medigap, consumers will be able to shop for plans online and verify the minimal standards of the Tier 2 plan they select.

Tier 2 plans may be very general, or they may be very specific for particular groups, such as the elderly, veterans, or factory workers. They may be offered through supplements by the federal government (as a substitute for Medicare), Veterans Affairs (as a substitute for veteran benefits), or employers (for disability insurance, worker's compensation not covered by Tier 1 or as a limited bonus).

Because Tier 1 covers most catastrophic medical occurrences, such as trauma or cancer, we believe the price of Tier 2 services would be significantly lower than that of current health insurance policies. This means that most Tier 2 plans should be affordable for the average consumer. In addition, unlike current private policies offered through a job or a healthcare exchange (either state run or federally managed plans under the ACA), any policy purchased under EMBRACE would be fully portable throughout the United States.

Tier 2 plans would also be available through other means. They could be offered as hiring incentives; veteran benefits; rewards for meeting certain preventive goals (in Tier 1), such as quitting smoking or losing a certain amount of weight; or even as an age-based substitute for Medicare.

Unlike the current system, there is no need to provide proof of insurance for a doctor's visit or scheduled procedure. Instead, all insurance information is computerized and immediately available to the healthcare provider.

Finally, on average, the overall healthcare related cost to consumers under EMBRACE will be equal to or less than what they currently pay. Today, most consumers pay for healthcare in many different ways—so many that it is difficult to know the true cost. There are premium payments (that are often hidden in payroll deductions for employer-provided insurance), payroll deductions meant to support the Medicare Trust Fund and several forms of out-of-pocket payments, such as deductibles and copayments. Some insurance policies offer different coverage depending on the contracted provider network, charging a penalty if the consumer goes "out of network," and premiums can change if the consumer moves or changes jobs.

Tier 3 services would generally not be covered by insurance, which is typical of the current system.

The Healthcare Information Platform

Although the services in the three tiers are covered by different payers, they would all be connected by a centralized platform called the Healthcare Information Platform (HIP). The HIP would be a secure web-based system available to every licensed healthcare provider. On the provider side (doctor, nurse, physical therapist, hospital, nursing home, etc.), a single patient encounter page—the Universal Billing Form (UBF)—would apply to all patient encounters. The provider completes this form and submits it electronically to a “central computer.” This computer would analyze the data and determine to which tier the patient’s condition and services correspond. If a Tier 1 service is determined, the provider is paid immediately. A Tier 2 determination leads to a search for insurance and, if private insurance coverage exists, the insurance company is notified. If the patient has no insurance for a service determined to fall under a Tier 2 or Tier 3 plan, the HIP bills the patient for the service on behalf of the provider. (All Tier 1 services are covered, regardless of the patient’s insurance status.)

The UBF addresses several often-overlooked deficiencies in the current US healthcare system. The first is the inefficiency of the current billing system. Over the years, the bureaucracy that has built up around insurance billing has become one of the most burdensome and wasteful aspects of medical practice. Medical providers must either spend hours dealing with forms and discussing cases with insurance companies or hire others to do so. Patients are also increasingly caught in this process. In addition, insurance companies spend a lot to “screen” these claims. Under the current system, this screening process is an essential component of the companies’ business models but significantly increases cost.

Because EMBRACE virtually eliminates these burdensome and wasteful hurdles, it has been estimated that as much as \$350 billion could be saved annually.¹

Beyond the HIP’s billing functions, access to its web-based platform will be available to application developers. Similar to the manner in which the Apple iPhone and iPad platform runs Apple devices while allowing entrepreneurs to develop millions of “apps,” the HIP would be available to developers for application development that could be used by the entire healthcare system.

Applications such as electronic medical records would be especially welcome, as many of those currently offered have the disadvantage of not being interoperable. This inability to freely exchange information electronically increases medical costs and adversely affects patient care.

The common platform and the stipulation that all patient data be easily accessible to providers not only make the EMBRACE system more efficient but also provide an opportunity to obtain direct data on almost all aspects of medical care. Currently, data collection is inefficient, costly, and relatively unreliable, which makes the monitoring of routine healthcare quality difficult. As part of the EMBRACE infrastructure, the HIP would allow for real-time feedback on public

health programs, drug and device efficacy/safety and even the early detection of developing epidemics.

The National Medical Board

Data analysis and the subsequent ability to act are difficult without a centralized agency to oversee all aspects of the nation's very large and complex healthcare system. Currently, no single agency does so, and many of the agencies or groups that do exist have duplicate "jurisdictions" and rarely cooperate. Government agencies—such as the Department of Health and Human Services (HHS) and Veterans Healthcare Administration (VHA)—and the unregulated private insurance industry, make up a complex and inefficient mosaic of healthcare oversight and services, with no clear "master plan." Under EMBRACE, all aspects of the USHS will be integrated into the NMB.

EMBRACE proposes that the structure of NMB be similar to that of the Federal Reserve (FED). Its Chair, a physician with experience in public health and healthcare economics, would be appointed by the President and confirmed by Congress for a 10-year term. Like the FED, there would be a Board of Governors that would have representation of all parts of the healthcare system. This would include governors overseeing public health (replacing the CDC), drugs and devices (replacing the FDA), healthcare-system research (replacing the NIH and AHRQ), Tier System administration (which would include public benefits, private benefits and guideline development), patient-centered care, nursing, hospitals, veterans' healthcare administration (replacing the VHA), HIP administration, medical imaging, medical laboratory administration, post-graduate medical education and others as needed.

An Advisory Council would represent special interest groups, such as the pharmaceutical industry, device companies, private insurance firms, businesses, religious groups, and others.

And, since there is significant geographic variation in healthcare, the NMB would have Regional Chapters.

The NMB's stated mission will be 'to promote the health of each and every person in the United States of America'.

The NMB will have many functions, with its top priority being the oversight of the tiered benefits system and the determination of the tier assignments of all conditions and services. Initially, these tier assignments will be determined by using all available scientific evidence of testing algorithms, illness severity, and treatment effectiveness. Of course, most of the studies currently available are not designed with the intention of advancing healthcare delivery in general and EMBRACE specifically. Therefore, the NMB will eventually need to "commission" its own studies.

Pharmaceutical and medical device companies design and finance most of the large studies on therapy in an effort to obtain product approval. Consequently, the resulting information is difficult to apply to actual clinical use. Moreover, objective comparative outcome data (i.e., information on how particular drugs or devices perform against others) is virtually nonexistent.

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In addition, these studies often enroll limited types of patients (e.g., only patients over the age of sixty-five), so the resultant data are also limited in their clinical usefulness.

Under EMBRACE, the NMB will be able to commission studies designed to facilitate tier assignment specifically and ensure that the research has maximal effect on public health. As these studies are completed, the NMB will be able to “fine-tune” the various tier assignments.

A Unified Healthcare System

Together, these three innovations would form a unified healthcare system integrating 21st century technology and infrastructure that is overseen by the NMB. The NMB will have control over the entire USHS, including the Tier system of public and private insurance, the health information platform, drugs and devices, medical research, post-graduate education of all healthcare professionals, etc.

Part 2: EMBRACE at work

The Patient/Consumer

EMBRACE provides universal access to the entire population, regardless of age, gender, employment status, military service, ethnic group, income status, or ability to pay. Under EMBRACE, every US citizen is automatically enrolled (with some stipulations for noncitizens), without a fee or an enrollment form.

When EMBRACE begins, most people will be entered in Tier 1 (basic health coverage) during their first visit to a healthcare professional. All that is required on subsequent visits is a form of ID such as an identity card or even fingerprints; all information is then available to the healthcare provider through his or her computer. Newborns will be entered at birth and carry the coverage for the rest of their lives.

Although Tier 1 provides everyone with coverage of the most important and dangerous conditions, many consumers will want to supplement this “safety-net” coverage with a Tier 2 plan. Purchasing a Tier 2 plan is not mandatory, but it is likely to be significantly less expensive than private health insurance under the current system. These private plans are portable from job to job and state to state.

And, under EMBRACE, patients will have access to all providers. There will be no ‘in-network’ type restrictions to which doctor or hospital one can use.

The Healthcare Provider

For the healthcare provider, EMBRACE preserves most of the current system’s best features and drastically improves many of the most troublesome. It also helps healthcare providers deliver the best, scientifically validated therapy to their patients with a minimum of bureaucratic and financial burdens.

Central to this is the HIP and its provider interface, the UBF. When providers log into the HIP, they enter basic identifying information about the patient in the UBF, and the patient’s medical

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chart becomes available immediately. Providers then use their own electronic medical charting program to record the patient visit.

Although the HIP is a common platform, each office, hospital and nursing facility would provide its own form of electronic medical records (EMRs) that comply with the HIP platform. Like the Apple iOS operating system, application developers will be able to develop apps and hardware that seamlessly integrate with the HIP. These apps may include EMRs, lab reports or software to view imaging tests such as echocardiograms or MRIs. And because they all share a common platform with required specifications, there is complete interoperability among systems.

After the charting is completed by the healthcare provider, a copy goes to the provider's own server (as a patient file), and another copy is sent through the HIP to a national server. Concurrently, providers submit their bills using the existent Current Procedural Terminology codes (codes that determine types of service) and the International Classification of Diseases codes (codes that classify diseases). Once submitted, the HIP uses scientifically derived criteria to determine under which tier the service falls. If it is determined to be Tier 1, the provider is immediately credited (paid) for that service. If the service is determined to be Tier 2, the HIP searches to see if the patient has private insurance coverage. If the patient is covered, the HIP contacts the insurance company, and the provider is paid. If there is no insurance coverage for the service, the patient is billed for it.

In certain cases, it may be unclear to doctors and nurses whether the service they plan to give to the patient would be Tier 1 (where the patient would not have to pay), Tier 2, or Tier 3. In such cases, the provider simply adds a query to the UBF. This allows the provider the opportunity to discuss the options (and prices) with the patient, especially if the service is determined to fall under Tier 2 or Tier 3.

There are no precertifications or denials, and providers can do most of the billing themselves. Providers can appeal decisions where a particular service is not covered by Tier 1, but these appeals will be considered by the NMB in aggregate only; and not for the individual patient.

Another important clinical advantage of the HIP is that all testing results, no matter where the tests are performed, are available to all providers involved in a patient's care (as well as to the patient). This applies not only to laboratory tests of blood and other bodily fluids but also to pathology specimens and imaging studies. Imaging studies are provided, along with the physician's interpretation, and they also contain a link to access the image itself. In some cases, this access also includes the raw data originally collected by the imaging laboratory. In this way, the consulting doctor can reprocess the data if needed.

This ability to access the original testing data, rather than just someone's interpretation of the results, not only significantly improves patient care but also reduces the number of repeat tests required thereby reducing costs. In some instances (e.g., tests involving X-rays and nuclear agents), this reduces patients' exposure to harm, such as radiation.

EMBRACE simplifies the issue of board certification and maintenance of certification. The ABMS, which oversees certification, as well as the non-ABMS boards (such as those that certify doctors in nuclear cardiology or echocardiography), will either be taken over and reorganized by the NMB or disbanded. Either way, all oversight for the certification and maintenance of

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certification of healthcare professionals—including nurses and medical technicians—will be overseen by the NMB.

This change makes it possible to more fully integrate the process of maintaining certification into everyday practice. Providers can take online courses (offered through the HIP) specifically tailored to their specialties, eliminating the need to travel or take time off.

Hospitals

The diversity of hospitals in the US healthcare system is unique in the industrialized world. In 2012, there were more than fifty-seven hundred hospitals registered with the American Hospital Association in the United States, which includes federal hospitals (such as those run by the VA), nonfederal psychiatric hospitals, nonfederal long-term-care hospitals, prison-based hospitals, college infirmaries, and community hospitals. Community hospitals make up the largest group and can be nongovernment, not-for-profit, or for-profit, as well as institutions run by state and local governments. Most community hospitals are “general” and admit a variety of patients, while others focus on specialties, such as cancer; obstetrics/gynecology; eye, ear, nose, and throat; rehabilitation; and orthopedics.²

Compared to hospital systems in other countries, those in the United States have the highest administrative costs, which account for about 25 percent—or more than \$200 billion—of total hospital costs per year. The administrative costs seem to be correlated directly with the degree of penetration of “market-oriented payment” (private insurance rather than single payer) into the healthcare system. Countries that primarily use single-payer systems incur half of our system’s costs.³ This suggests that the reduction of US administrative costs would best be accomplished with a simpler and less market-oriented payment scheme, such as EMBRACE.

The incredible variety of hospital types in the United States has grown out of our uniquely complex healthcare system, which has both disadvantages and advantages.

The main disadvantages of the system are its redundancy and inefficiency. Hospitals duplicate services; alternatively, because of budgetary considerations, some services are underrepresented compared with need. Further, more lucrative services may be overrepresented. This means that there may be longer waits for some services (or even no service) for underrepresented services, while the overrepresented services might cause wasted resources and even a dilution of experience for doctors and other medical personnel. How would you like to have your heart surgery performed by a surgeon who only does five a year?

Because some hospitals, such as those that treat veterans or those belonging to a particular HMO, accept different insurance than do others, patients are limited to participating hospitals for their regular care. This significantly limits the choice and even mobility of the patient/consumer, as there may be only a limited number of participating hospitals.

A rather disturbing secret is that most American hospitals tailor medical care based on a patient’s insurance status. Although this might seem unfair and maybe even discriminatory, for the most part, it is really done for the patient’s benefit. If patients lack insurance or have inadequate insurance, they may be unable to afford their medications and outpatient testing.

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Consequently, the care team, which often is different for these patients than for “private” patients, might elect to do testing and treatments in the hospital that would more appropriately be done in an outpatient capacity. Further, doctors might prescribe cheaper—and possibly less effective—medications on discharge.

Because the uninsured pose significant financial pressures, hospitals in poorer areas have more limited funds and therefore have a harder time providing the best services to their patients, even for those who have insurance. This discrepancy is compounded by the fact that these hospitals tend to be in regions with sicker populations that rely more than others do on hospital-based care.

In addition, the way that hospitals are paid by Medicaid and Medicare is variable, unpredictable, and mired in politics. This makes it all the more difficult for hospitals to make business decisions and devise future financial plans.

There are, however, some good aspects of the US hospital system, such as serving their communities. In addition, competition with other facilities often results in better-quality facilities and facility improvements.

The specialized aspect of the US hospital system is not unique. Most industrialized countries have a similar stratified system, from the local “general” or community hospital to the large tertiary teaching hospitals, such as the Mayo Clinic, that may take referrals from all over the country (and even the world). What makes the US system different is that the government runs only a few hospitals (about 20 percent). More than 90 percent of hospitals in European countries with some form of single-payer systems, such as Sweden and the United Kingdom, are considered to be government run.⁴

Although the merits of government-run hospitals are debatable, in the United States there is clearly a public preference for non-government-run hospitals. Much of this is due to the public perception that nongovernment hospitals provide better service and, maybe, better care. Certainly, the 2014 scandals involving the VA hospital system, where dangerously long patient wait times for treatment were allegedly covered up, serve to further that perception. Another common belief is that competition for patients among nongovernment hospitals not only improves service but may also improve the breadth and quality of care.

EMBRACE eliminates or greatly reduces most of the current system’s disadvantages while maintaining the advantages. There is no difference in insurance status among patients for most hospital-based treatments, because most nonelective admissions tend to be Tier 1. Consequently, under EMBRACE, the bipartite system of insured/uninsured patients would be a thing of the past for Tier 1 conditions. This would not only improve patient care, but it also would reduce hospital and healthcare system costs as a whole. There is significantly less need for specialists to treat the uninsured and underinsured. Additionally, because the rules for care under EMBRACE are the same for each patient, there is a greatly reduced need for social workers and medical billers.

Under EMBRACE, hospitals will be allowed to create their own business plans. Each hospital would decide on the price of its Tier 2 services and make these prices available to the public; these are the prices charged to patients who do not have Tier 2 insurance. In addition, as in the

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current system, each hospital will be able to negotiate with insurance companies for Tier 2 “contracted” rates, which will not need to be made public.

Tier 1 reimbursement rates will be determined by the NMB on an individual basis, based on the region and its disease prevalence. These rates will be reviewed and updated periodically through a process that involves both the hospital and the NMB’s local representatives. Reimbursement includes outpatient preventive programs initiated and run by the hospital, as well as medical education for trainees, such as residents and nursing students.

Public Health

EMBRACE’s third innovation, the NMB, would be set up as the brain and heart of our nation’s new healthcare system. Its oversight of all aspects of the healthcare system will not only give it control of healthcare delivery to the entire population, but it will also be able to prioritize which research is needed to make that delivery more effective and efficient. The fully integrated system under the HIP, facilitates the use of practice guidelines at the point of care and allows for the collection of almost instantaneous epidemiologic data. This information will be complete (as information from the entire population will be transmitted via the HIP), instantly available for analysis, and inexpensive.

Because the NMB will oversee the entire database, it would be more readily available for meaningful analysis, and duplication would be less likely. The NMB could use the database not only to monitor epidemiologic occurrences and responses to any treatment side effects but also to modify tier assignments and even look for patterns of tier-system abuse.

In addition, because the NMB will have control over how the tiers are allocated, there is ample opportunity to incorporate guidelines into the tier assignments. This is done in a way that does not interfere with clinicians’ workflow and allows them to tailor the workup and therapy to the patient’s needs. This mechanism of guideline integration into the HIP/UBF would also allow for the seamless incorporation of preventive services into the workflow. And because Tier 1 covers all of these preventive and lifesaving services, they will be easily available and free to the consumer/patient.

Other preventive services and programs can also be established under EMBRACE. One such program might include awarding Tier 2 upgrades to patients/consumers who have met several of their treatment goals. For example, those who stop smoking might be awarded Tier 2 coverage as long as they continue to refrain from smoking. Of course, this will have to be verified by some mechanism. Other examples could include weight loss or diabetes control.

Another possible initiative of the EMBRACE system might provide tax benefits for businesses that develop effective fitness or prevention programs for their employees. Although this might exist now in some corporations, there is no mechanism in our current healthcare system to study the effectiveness of these programs or to compare programs. Under EMBRACE, comparative effectiveness studies will be much easier to conduct because all participants are automatically enrolled in the databases.

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The NMB's direct oversight of the HIP will not only allow it to change tier assignments as information becomes available but also to provide instant access to the data generated by the HIP on diseases and therapies. These data might help the NMB to identify epidemic outbreaks early on and obtain information on the efficacy of drugs and devices long after they are approved and in public use.

Currently, information on how drugs and devices perform in the "real world" (after receiving FDA approval) is acquired through what are called Phase IV studies, which are difficult and expensive to administer. Alternatively, the FDA receives reports from doctors, hospitals, and patients regarding adverse outcomes from drugs or device malfunctions. These reports are not always reliable, and it may take time to identify a problem. Under EMBRACE, all of these data will be easily and inexpensively acquired on a constant and virtually instantaneous basis enabling a robust system of drug and device safety surveillance. This in turn can be quickly analyzed by the NMB and allow appropriate actions to be taken.

Automatic enrollment in Phase IV and other trials will be beneficial no matter what public health initiative is undertaken. This will make studies easier to carry out and analyze and will cost significantly less than they do currently.

The most important public health advantage of EMBRACE over the current system, however, will be the ability of the NMB to commission studies that will produce data tailored specifically for clinical use in the tiered healthcare system. These large population studies will be easier to organize, significantly less expensive than current studies, and have a built-in infrastructure to translate the data into practice.

The effect of EMBRACE on the nation's healthcare system, and especially the nation's health, would be far-reaching. This is not simply because it assures universal coverage and helps keep healthcare costs under control, which has been the focus of prior healthcare reform efforts. EMBRACE will also significantly emphasize prevention and treatment of the most life-threatening ailments. And, when fully implemented, EMBRACE will have the mechanisms in place not only to develop and implement clinically useful testing protocols and therapies but also to monitor their usefulness, efficiency, and effectiveness in a timely way. In addition, contemporaneous data will be available on possible new illness outbreaks, which currently might take months or years to identify.

Private Insurance

Under EMBRACE, representatives from each insurance provider would have to opportunity to participate in the private insurance section of the NMB. Along with the rest of the board, this group establishes the menu of plans offered under Tier 2 that is based on the Medigap menu.

Like the Medigap menu, there are several different Tier 2 plan options from which to choose. The options will be listed side by side and indicate the minimum coverage benefits that the particular plan must include. Once consumers choose a plan, another linked menu appears that lists the insurance companies offering that plan, any additional benefits that the insurance

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company is offering and all copays, deductibles and any yearly and lifetime limits on what the insurance company will pay.

Insurance companies are not required to participate in each plan option under EMBRACE. But if they do offer a particular plan, it must adhere to the minimal requirements in that category and be available in all states. (The NMB might possibly allow for a small geographic variation in premiums.)

There are several potential benefits for insurance companies. One of the most significant would be the reduced “risk” of having to pay out large sums of money to cover the most expensive treatments, as these are most often covered by Tier 1. EMBRACE offers insurance providers a large potential clientele with a relatively low-risk profile. Because every US citizen is a member of EMBRACE, insurance companies have the entire population as potential clientele. Because every citizen will have Tier 1 coverage, the entire population is relatively low risk. Private insurance companies will not have to pay for the treatment of heart attacks, cancers, pregnancies, high blood pressure, diabetes, and other conditions. The potential liability is quite small and potential profits more secure.

Because preauthorization and other administrative processes would either be eliminated or carried out by the UBF system, another benefit will be a significant savings in administrative costs (estimated at between 10 and 20 percent). In addition, as with automobile insurance, there may be a way to allow the insurance company to increase its premiums to individuals according to the number of claims and their payout amounts. This will not only limit “frivolous” Tier 2 claims by the insured, but it will also encourage the consumer to shop around for the best price for a particular therapy or service.

In addition, it is likely that the NMB will allow insurance companies to charge copays, have deductibles, and limit the total payments made for various Tier 2 conditions, the latter of which is not allowed under the ACA.

It is very likely that the profit potential for private insurers under EMBRACE is as good as, if not better than, the current system, and it is significantly better than a single-payer system would allow. Tier 1 generally includes what many insurers consider “risky” conditions. This means that the potential for large claims for these conditions will be eliminated for private insurers. Most of the conditions assigned to Tier 2 are generally associated with limited costs and have tests and treatments that are mostly elective. This in turn means that patients/consumers have more time to assess whether they need the therapy or procedure and even to shop around for a better price or an alternative therapy, possibly with the aid of the insurer.

Like the current system (and unlike the single-payer system), health insurance companies under EMBRACE can be for-profit but can also be not-for-profit or government agencies (e.g., the VHA).

Funding

Funding for all NMB activities, including payment for Tier 1 services and commissioned studies, will come from an annual budgeted allocation from Congress. These funds would be raised by a

payroll tax similar to—and in place of—the current Medicare funding by the Federal Insurance Contributions Act (FICA) for consumers—and a graduated tax for businesses based solely on the number of employees and their salaries.

3: Cost Analysis

As of now there are no thorough cost analysis studies on EMBRACE. This is partially because the group who developed the plan (Healthcare Professionals for Healthcare Reform) did not have the funding to support such a complex analysis and partially because of the nature of the proposed funding for EMBRACE.

EMBRACE proposes that Congress funds the National Medical Board with one annual appropriation (excluding possible ‘emergency’ appropriations for unforeseen problems like major epidemics). This appropriation will cover not only public benefits, but also publicly funded healthcare research, tier system development and administration, postgraduate medical and nursing education, pharmaceutical and device regulation, HIP development and administration and any other healthcare system cost that might arise. Although most of these will replace existing publicly funded programs, their cost under the NMB might be difficult to predict.

However, we can make some educated assumptions about how EMBRACE might save costs and where it might increase it. These judgments could serve as hypotheses for formal cost analyses.

Factors that will reduce public healthcare expenditures

By integrating all public healthcare benefits such as the Veteran’s Healthcare Administration (VHA), Medicare, Medicaid and Indian Health Service (IHS) under the control of the NMB, there would be fewer duplication of services and subsequently less redundant funding requirements. A prime example of this is the Veterans Choice (and more recent MISSION) Act that was needed to cover the more than 15 million medical procedures a year performed for veterans by non-VA providers. These “out of system” services have been estimated to cost more than \$7 billion a year. Similarly, the Indian Health Services insurance program is another redundant publicly funded benefits program costing \$5 billion a year.⁵

By integrating all federal healthcare agencies such as the CDC, NIH and FDA under the NMB, their respective functions can be better coordinated, and funding can be better targeted. It is difficult to say how much immediate savings this would garner, but we believe that it would ultimately lead to more effective and efficient components of the healthcare system infrastructure that would, in turn, lead to overall savings. For example, the NMB’s oversight and direct funding of public health would allow it to commission studies specifically directed for tier assignments. This would be a unique concept in healthcare research, and one that would get the most ‘bang for the buck.’ Instead of extrapolating data from industry sponsored studies with other priorities (such as drug approval), these studies would be directed to prove that they fit criteria for tier 1; such as life-saving properties.

EMBRACE: A Unified Universal Healthcare System

By removing the need for premium support for private insurance bought through the healthcare exchanges and state Medicaid expansion there will be significant savings for both federal and state governments. These savings will come not only from saving on supplementing these benefits but also from not having to maintain the exchanges and programs.

Because many of the services currently covered by Medicare and Medicaid (as well as VHA and IHS) would be moved to Tier 2, there would be a significant reduction of public funding requirements for these benefit programs. The actual amount of potential savings is difficult to calculate since we do not know what the NMB would ultimately include in Tier 1 (versus Tier 2) services. However, we believe these could be significant. The amount may possibly equal or exceed the amount that would have to be spent on Tier 1 coverage for consumers who are currently covered by private insurance. These privately covered patients are generally younger and in better overall health than patients receiving 'public benefits,' and are therefore less likely to require the costliest Tier 1 services.

By reducing the entire public healthcare budget to one annual Congressional appropriation, healthcare spending would be significantly more transparent and manageable. In addition, it would transfer the onus of allocating these funds from Congress on to the NMB where political and special interest pressures would be significantly less.

In addition, EMBRACE will abolish state spending on Medicaid, will significantly reduce costs to federal, state, and local governments for health insurance coverage of government employees, and will appreciably lower the government cost of implementing EMRs.

Finally, EMBRACE's infrastructure will provide a much more effective mechanism to implement preventive measures than in the current system, which in turn will reduce the need to spend more on treating preventable Tier 1 conditions.

Factors that will reduce non-public healthcare expenditures

Although public spending on healthcare is the most concerning to lawmakers and taxpayers, excessive costs that are not covered by public funding is also very important to consumers (patients), healthcare providers, hospitals and insurance companies. And, there are huge opportunities in our current system.

EMBRACE's HIP-linked billing system will significantly reduce administrative costs for medical offices, hospitals, nursing homes and even private insurance companies. Currently huge amounts of resources are spent for billing and other administrative tasks linked to private insurance. It has been estimated that a simplified financing/billing system in the U.S. like EMBRACE could result in cost savings exceeding \$350 billion annually, nearly 15% of health care spending.¹

These savings would not only help office-based practices, nursing homes and hospitals with their balance sheets but would also significantly reduce out of pocket expenses for consumers. It would even help insurance companies' bottom line.

Hospitals would also save on having to treat the uninsured and under-insured.

EMBRACE: A Unified Universal Healthcare System

By eliminating the requirement that businesses provide health insurance to their employees, EMBRACE would all but eliminate healthcare related costs for businesses. Businesses would not only save on the cost of insurance premiums, but also from the reduced administrative costs of maintaining the plans. There may also be substantial saving from pension related health insurance costs. All these savings will not only help businesses be more competitive, but also allow to increase the salaries of their employees thereby mitigating the impact of the health care FICA tax on the employee's take home pay.

The HIP's 'common platform' that mandates interoperability and easy access to medical data for clinicians will also significantly cut costs and improve quality of care. One example is that the system would reduce the need to repeat work-ups and repeat testing. The extent of this problem has not been well studied, but most clinicians are quite familiar with this- and we believe it is quite prevalent.

Another way that the common platform will reduce costs is that it would reduce the cost to providers for EMRs and other important software applications needed to run an efficient and high-quality medical facility.

Factors that will increase public healthcare expenditures

The NMB would be a large new agency with many employees and, most likely, several consulting agencies. Although many of the proposed functions of the NMB are currently performed by HHS, we believe that the overall budget would likely be larger.

Another likely increase in public costs would be the development and subsequent maintenance of the HIP. Currently, there is some public funding to support EMR implementation, but there is no large-scale public program to create an electronic infrastructure like we propose in EMBRACE. We believe that these increases in expenditures on the HIP will be well worth the investment.

¹ Jiwani A, Himmelstein DU, Woolhandler SJ, Kahn JG. Billing and insurance-related administrative costs in United States' health care: synthesis of micro-costing evidence. *BMC health services research* (2014). <https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-014-0556-7> (Accessed 12/26/2018).

² Health Forum LLC, "Fast Facts on US Hospitals," from the 2014 AHA Annual Survey, American Hospital Association. <http://www.aha.org/research/rc/stat-studies/fast-facts.shtml>.

³ D. U. Himmelstein et al., "A Comparison of Hospital Administrative Costs in Eight Nations: U.S. Costs Exceed All Others by Far," *Health Affairs* 33, no. 9 (2014): 1586–94.

⁴ Fanny Chevalier Dexia and Judith Léviton, under the supervision of Dominique Hoorens. "Hospitals in the 27 Member States of the European Union," Dexia Editions, January 2009, http://www.hope.be/05eventsandpublications/docpublications/79_hospitals_in_eu/79-hospitals-in-the-eu-2009.pdf.

⁵ <https://www.ihs.gov/newsroom/factsheets/ihsprofile/>