



## The National Program for Quality Indicators:

For

## General and Geriatric Hospitals, Psychiatric Hospitals, Mother & Baby Health Centers and Emergency Medical Services (Ambulances)

### Annual Report for 2013-2020

Quality and Safety Division  
Health Services Research Department  
Israel Ministry of Health  
Jerusalem

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## Results' Summary and Discussion

The year 2020 turned up as the "COVID-19 year", when the effects of the COVID-19 pandemic were felt throughout all activity aspects of the health system, including quality measurement. In different countries, various effects of the pandemic on the compliance rates of the quality indicators have been observed. Most reports from around the world were from a single medical center or a limited number of centers, and to the best of our knowledge, studies showing the effect of the pandemic on quality indicators at the national level have not yet been published. In the USA, the Centers for Medicare & Medicaid Services put on hold collecting and reporting to the quality indicators program. In Israel, however, the activity of the Israeli National Program for Quality Indicators (INPQ) continued despite the COVID-19 pandemic. Completion of the uninterrupted reporting to the program for the 2020 measurement year, made it possible to analyze the impact of the pandemic on quality indicators in all areas of measurement – General, Geriatric and Psychiatric Hospitals, Pre-Hospital Services and Mother & Baby Health Centers.

The figures below show a comparison between the 2020 data to the 2019 data of two parameters: The activity of the quality indicators, as reflected by the denominator, and the compliance rates to the indicators. Hospitals and other service providers who did not report and/or indicators that were not reported for full two years (2019 and 2020) were not included in this comparison.

In **general hospitals**, a clear decrease in indicators activity was observed in 2020 compared to 2019. Several indicators showed a more pronounced decrease in the activity than others: the indicators **venous thromboembolism risk assessment for patients in general medicine wards** (21% decrease) and **duplex carotid ultrasound performed within 72 hours of admission to ED for patients with suspected TIA** (14% decrease). Possible reasons for these findings include a decrease in the number of referrals to the emergency departments and the number of hospitalizations, as well as due to the transformation of general medical wards to COVID-19 only wards. In parallel with the decrease in the number of premature births during the pandemic period, there was a decrease in the activity of **neonatology** indicators (**administration of at least one course of antenatal corticosteroid in preterm deliveries** and **preterm neonates who had a body temperature of at least 36°C upon arrival in the NICU**). In the indicator **intravenous thrombolytic treatment (IV-rtPA) and/or mechanical embolectomy for acute ischemic stroke**, an increase of 9% was observed in the number of treatments, mainly due to the increase of cerebral mechanical thrombectomy capabilities at the national level.



Although there was a decrease in the indicators' activity, the compliance rates of the indicators remained stable and some of them even improved. The compliance rates of the **PCI within 90 minutes for patients presenting with STEMI** and **time from arrival at Emergency Department to clinical triage** indicators remained stable. The compliance rates of **surgical repair of femoral neck fracture within 48 hours** and **antibiotic prophylaxis in colon/rectal, caesarean section and femoral neck fracture repairs surgeries**, improved (3%, 8%, 1% and 3% increase, respectively). The **median time to Head CT/MRI after arrival at hospital for patients with acute ischemic stroke** indicator decreased from 28 minutes to 27 minutes.

Since the elderly population is at high risk for COVID-19, **geriatric hospitals** have been greatly affected by the pandemic. Geriatric institutions have functioned in an unconventional environment with many challenges. This was also reflected in the effect of the pandemic on quality indicators measured in geriatric institutions. In 2020, a significant decrease of 10%-25% was observed in the activity of all indicators in this field. There was a significant decrease in the volume of the **inpatient indicators**, including **nutritional screening, diabetic foot lesions assessment** and **depression screening**. In addition, there was a significant decrease in the volume **of rehabilitation-related measures after a femoral neck fracture: functional assessment, vitamin D recommendation** and **delirium assessment**, which was most probably due to a preference to undergo rehabilitation outside of hospital settings as much as possible.

Despite the many difficulties that were experienced by the geriatric institutions with the outbreak of the COVID-19 pandemic, the vast majority of the quality indicators remained unaffected or there has been only a slight decline in compliance rate. The compliance rates of the **vitamin D recommendation after hip fracture repair, post-stroke depression screening** and **post-stroke functional assessment** indicators remained stable. The indicators with a slight decrease in compliance rates were: **Nutritional screening and fall risk assessment at hospital admission** (1% decrease); **Delirium assessment after femoral neck fracture repair** and **depression screening in elderly patients in sub-acute wards** (2% decrease); **Complete nutritional assessment** and **diabetic foot lesions assessment** (4% decrease); **Complete nutritional assessment for patients undergoing long-term artificial respiration** (7% decrease).

The pandemic has also challenged the **mental health system**, due to the uniqueness of the psychiatric hospitalization and the need for special setup for the treatment of COVID-19 patients suffering from mental disorders that



require hospitalization. A marked decrease in the activity of quality indicators in mental health hospitals was observed, especially in acute psychiatric hospitalization: **Risk assessment for violence in a mental health ED** (7% decrease), **a meeting between the attending physician and the family within 5 days of the child's admission to the mental health institution** (10% decrease), **and scheduling of a follow-up community-based appointment** (7% decrease). Apparently, the main reason for the decrease in the activity of these indicators is a decrease in admission rates to psychiatric emergency departments and consequently a decrease in the number of hospitalizations in mental health hospitals during the COVID-19 pandemic.

In the **meeting between the attending physician and the family within 5 days of the child's admission to the mental health institution indicator**, there was a significant decrease of 16% in the compliance rate. This is in contrast to the other indicators, since this specific indicator requires a face-to-face meeting, which was sometimes impossible due to the closure of departments for visits or family members being in isolation due to COVID-19 exposure. Other indicators of prolonged hospitalization in mental health hospitals are **screening surveys: blood pressure measurement, BMI measurement, diabetes mellitus screening and lipid profile measurement, fecal occult blood test and mammography**. These indicators showed moderate decrease in activity (about 5% decrease), and in most of these indicators the compliance rates increased, despite the overall decrease in activity.

Small increases in the activity were observed in the four indicators measured in the **pre-hospital** field, originated from the natural growth of the population. However, higher increases in the activity were expected. This means that despite the growth and the aging of the population, there was a decrease in the denominator, which indicates the effect of the COVID-19 pandemic on this field as well.

The activity of most of the indicators measured in **mother & baby health centers** decreased moderately at 3% at most. The slight decrease in the activity of the indicators in this specific field, as compared to the other measurement areas is due to the fact that the size of the population in this area depends mostly on the volume of births prior to the measurement time period, and therefore was not affected by the COVID-19 pandemic.

Although there was a decrease in the activity of the indicators, their compliance rates remained stable and some of them have even improved. Indicators that showed improvement in compliance rates are: **Vaccination against pertussis** (2%), **the Five-in-One DTap+IPV+Hib vaccination** (1%) and **maintaining**

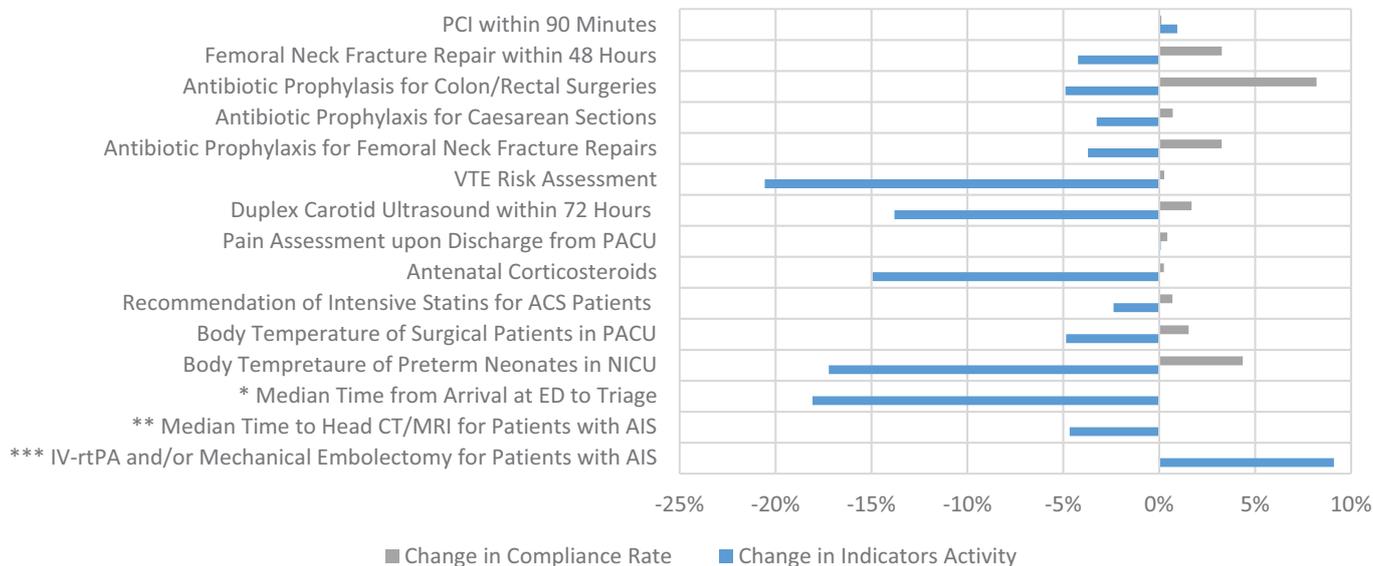


**exclusive breastfeeding** (1%). The compliance rate of **infants seen at a mother & baby health center within two weeks of birth** ("first visit") remained stable, and other indicators showed a very slight decrease of 1%-3% in compliance. All indicators measured in this field require face-to-face interaction between the mother, the baby and the health center team. Therefore, given the limitations during the COVID-19 pandemic, the decline in compliance rates in some indicators is expected.

In conclusion, in 2020, we observed a decrease in the activity of most indicators measured under the Israeli National Program for Quality Indicators (INPQ) program. However, the compliance rates did not drop, and in some indicators even improved. These results indicate that the quality of medical services was not affected during the COVID-19 outbreak in Israel. We view this as a great achievement of managers, quality personnel and clinical teams who invest a great effort in providing high quality medical services even during the COVID-19 pandemic.



## General Hospitals

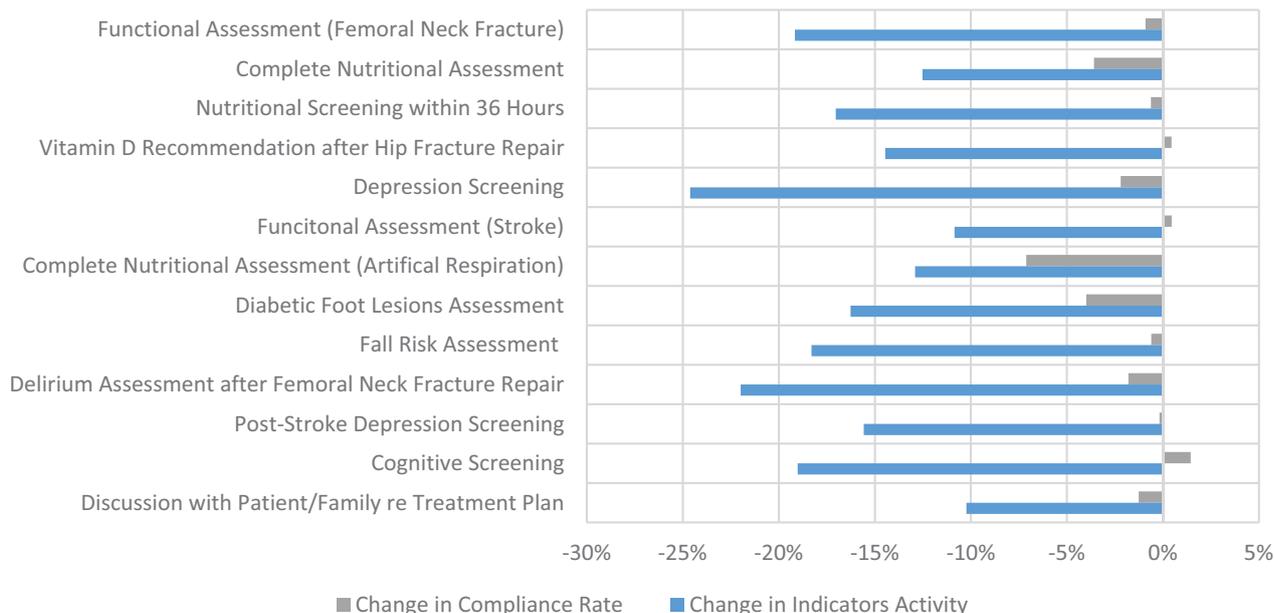


\* Median Time from Arrival at the ED to Triage: 9 minutes (2019), 9 minutes (2020)

\*\* Median Time to Head CT/MRI for Patients with Acute Ischemic Stroke: 28 minutes (2019), 27 minutes (2020)

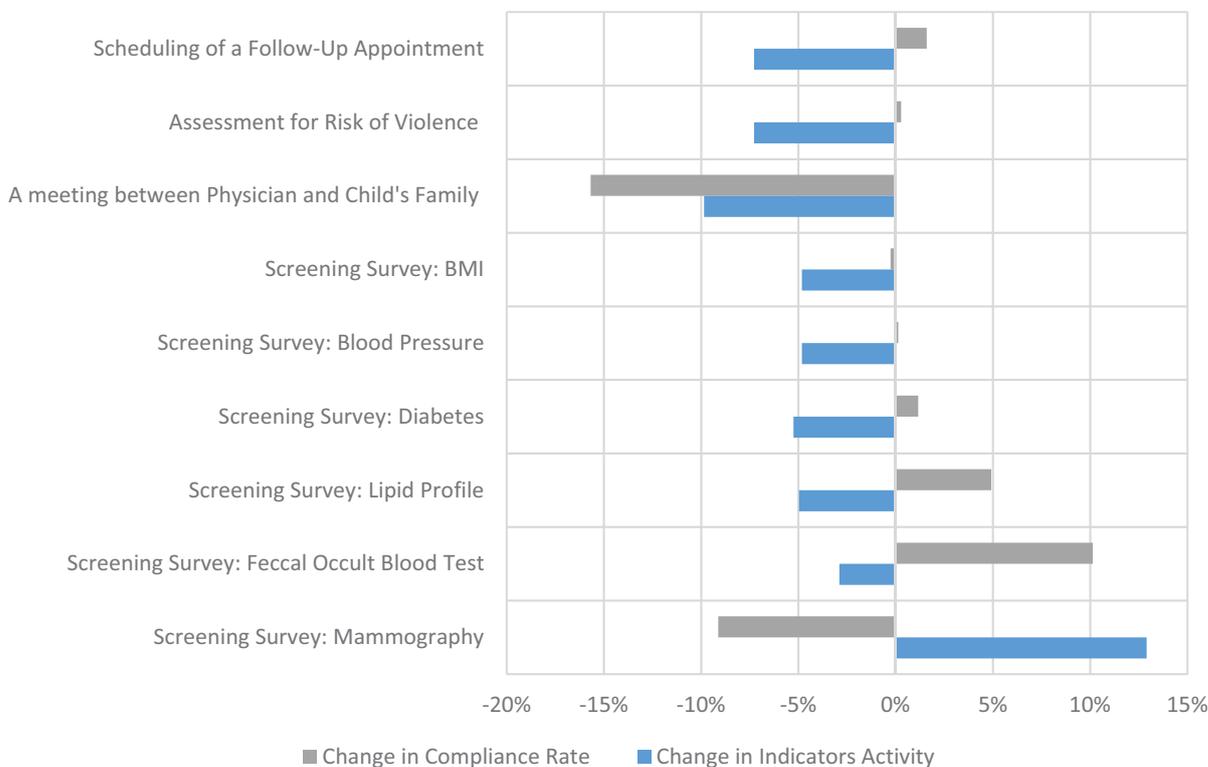
\*\*\* IV-rtPA and/or Mechanical Embolectomy: Increase of 9% in number of treatments

## Geriatric Hospitals

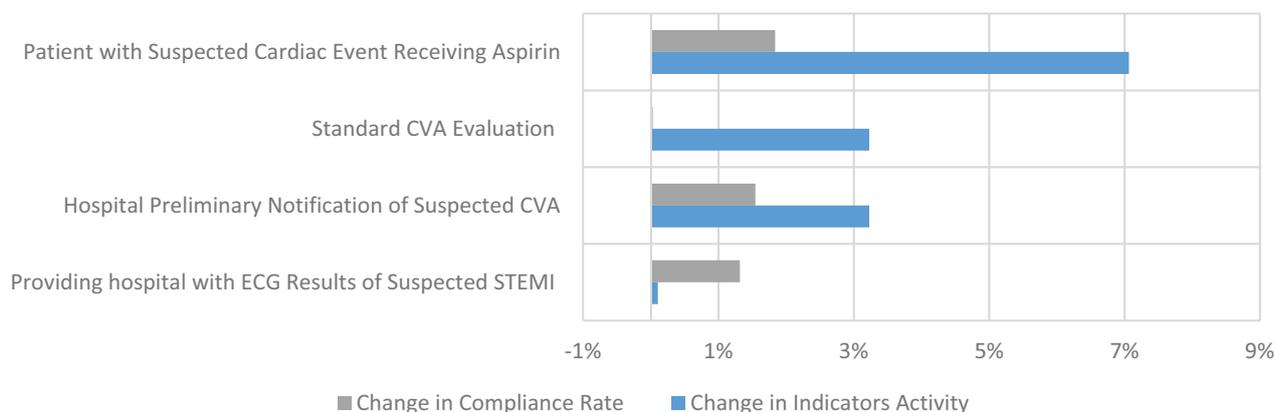




### Psychiatric Hospitals

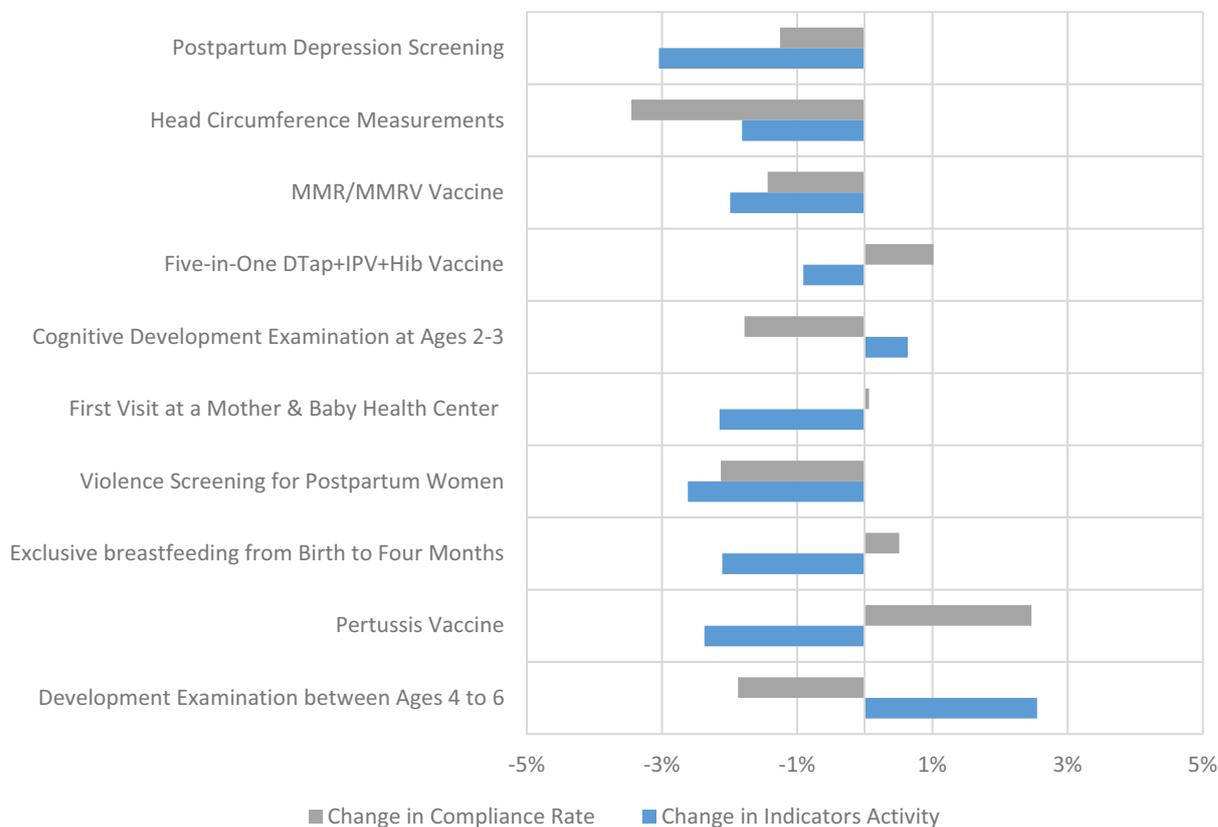


### Pre-Hospital Services





## Mother & Baby Health Centers





## Summary of results according to areas in the Program (national compliance rates for 2013-2020):

	2013	2014	2015	2016	2017	2018	2019	2020
<b>Acute Myocardial Infarction (AMI)</b>								
PCI within 90 minutes for patients presenting with STEMI	68%	79%	86%	90%	91%	91%	92%	92%
Percent of patients with ACS given a recommendation for aspirin at discharge	95%	96%	97%	98%	Disc.	Disc.	Disc.	Disc.
Providing hospital with ECG results of patient with suspected STEMI before arrival to hospital					90%	92%	94%	95%
Percent of patients with chest pain suspected as cardiac event who received aspirin (pre-hospital)				95%	96%	90%	94%	96%
Percent of patients with ACS receiving recommendation for intensive statin treatment upon discharge from hospital					90%	93%	95%	95%
<b>Cerebral Vascular Accident (CVA)</b>								
Median time to Head CT/MRI after arrival at hospital for patients with acute ischemic stroke			55 min.	38 min.	33 min.	29 min.	28 min.	27 min.
Intravenous thrombolytic treatment (IV-rtPA) and/or mechanical embolectomy for acute ischemic stroke (gross volume)		305	857	1180	1393	1638	1735	1893
Duplex carotid ultrasound performed within 72 hours of admission to ED for patients with suspected TIA			58%	73%	79%	83%	84%	86%
Performing a Functional Assessment upon admission and discharge to rehabilitation departments after Acute Ischemic Stroke			75%	91%	95%	96%	95%	96%
Patients with suspected CVA who received standard CVA evaluation in the ambulance during the transfer to hospital				82%	96%	96%	97%	97%



Hospital preliminary notification of patients with suspected CVA by ambulance crew					93%	93%	93%	94%
Risk assessment of CVA in patients with atrial fibrillation								91%
<b>Dialysis</b>								
Dialysis Adequacy							Published without national rate	Published without national rate
<b>Femoral Neck Fracture</b>								
Surgical repair of femoral neck fracture within 48 hours	71%	78%	83%	86%	86%	87%	86%	90%
Performing a Functional Assessment at admission and discharge to rehabilitation departments for patients who had femoral neck fractures		68%	75%	92%	96%	96%	95%	94%
Recommendation for vitamin D at discharge from rehabilitation after hip fracture repair		74%	88%	91%	94%	96%	97%	97%
<b>Prevention of Surgical Site Infection (SSI)</b>								
Administration of appropriate antibiotic prophylaxis for colon/rectal surgery				78%	83%	85%	86%	95%
Administration of appropriate antibiotic prophylaxis for femoral neck fracture repairs		66%	76%	86%	87%	88%	91%	94%
Administration of appropriate antibiotic prophylaxis for Caesarean section		78%	88%	93%	95%	95%	96%	97%
<b>Prevention of Venous Thromboembolism</b>								
Venous Thromboembolism risk assessment for patients in general medicine wards		62%	82%	92%	95%	95%	96%	96%
Antithrombotic prophylaxis for hysterectomy								93%
<b>Depression</b>								
Depression screening in elderly patients within 7 days of admission to sub-acute department				75%	89%	91%	88%	86%



Depression screening within 7 days of admission to rehabilitation department after stroke				55%	71%	82%	89%	89%
Percent of postpartum women who underwent postpartum depression screening			66%	77%	81%	85%	82%	81%
<b>Violence</b>								
Assessment for risk of violence to self and/or others at admission to mental health ED		39%	78%	87%	91%	90%	95%	95%
Percent of postpartum women who underwent violence screening				53%	70%	85%	86%	83%
<b>Treatment Continuity</b>								
Readmission rate to mental health hospital/ward within 30 days of discharge					20.4%	20%	18.6%	16.1%
The rate of mental health patients for whom a follow-up community-based appointment was scheduled		21%	57%	76%	84%	85%	89%	91%
The rate of mental health patients with a detailed summary within one week of discharge								85%
Percent of infants seen at a Mother & Baby Health Center within two weeks of birth				35%	38%	41%	43%	43%
Assessing medication appropriateness for elderly patients by physician and documentation of recommendation in disease summary								91%
Documented treatment plan in the patient's file within 5 days of admission to psychiatric ward (adults and children)								89%
Documented treatment plan in the patient's file once a quarter for patients with long-term hospitalization in psychiatric ward (adults and children)								96%



Growth and Development								
Percent of infants who reached 8 months of age with documentation of three separate head circumference measurements			89%	91%	91%	91%	92%	88%
Percent of children who reach three years of age with documentation of a cognitive development examination with an emphasis on language and communication skills			77%	83%	82%	83%	84%	82%
Percent of children who underwent development examination between ages 4 to 6						21%	24%	22%
Resuscitation								
Providing instructions from the Emergency Medical Dispatcher to perform CPR for a suspected cardiac arrest				91%	90%	96%	Not published this year due to COVID-19 constraints	Not published this year due to COVID-19 constraints
Pain								
Pain assessment within 12 hours of admission to a rehabilitation, acute or sub-acute department		79%	89%	94%	97%	97%	97%	96%
Percent of surgical patients who report a pain VAS score of 3 or less upon release from PACU				86%	95%	97%	97%	98%
Anesthesia								
Percent of surgical patients who had a peripheral body temperature of at least 35.5°C upon arrival in PACU					78%	91%	94%	96%
Vaccinations								
Percent of infants who reach 13 months of age who received at least one dose of the MMR/MMRV vaccine			60%	60%	61%	66%	73%	72%
Percent of infants who reach 18 months of age who received at least four doses of the Five-in-One DTap+IPV+Hib vaccine			79%	75%	78%	79%	80%	81%
Percent of infants who reached 7 months of age who received at least 3 doses of the Pertussis vaccine					61%	62%	64%	67%



Treatment Safety								
Fall risk assessment within 24 hours of admission to complex-nursing, rehabilitation and sub-acute departments			89%	96%	97%	98%	98%	98%
Hospital Admission								
A meeting between the attending physician and the family within 5 days of the child's admission to the mental health institution				27%	63%	80%	86%	71%
Discussion with the patient and/or the family regarding treatment plan within the first 30 days of hospitalization					40%	73%	77%	75%
Diabetes								
Assessment for diabetic foot lesions within 24 hours of admission			74%	90%	94%	95%	95%	91%
Nutrition								
Nutritional screening for patients admitted to rehabilitation and sub-acute department within 36 hours of admission		59%	83%	94%	98%	98%	98%	98%
Complete nutritional assessment for patients admitted to complex nursing care within 5 days of admission		31%	63%	74%	84%	90%	88%	84%
Complete nutritional assessment for patients undergoing long-term artificial respiration within 5 days of admission			83%	95%	94%	96%	97%	90%
Documentation of iron supplement provision for infants up to the age of 13 months								72%
Percentage of mothers who exclusively breastfeed from birth to four months				71%	69%	68%	69%	69%
Screening Surveys								
Delirium assessment at admission to rehabilitation for patients after femoral neck fracture repair				55%	83%	91%	94%	92%



Long-term mental health patients: percent of patients hospitalized for 180 consecutive days or longer with documentation that their blood pressure is measured at least once every six months			99%	99%	99%	99%	100%	100%
Long-term mental health patients: percent of patients hospitalized for 180 consecutive days or longer with documentation that their lipid profile is measured at least once every six months			52%	60%	72%	81%	86%	91%
Long-term mental health patients: percent of patients hospitalized for 180 consecutive days or longer with documentation that they are screened for diabetes mellitus at least once every six months			61%	73%	71%	87%	86%	87%
Long-term mental health patients: percent of patients hospitalized for 180 consecutive days or longer with documentation that their BMI is measured at least once every six months			80%	90%	94%	98%	98%	98%
Long-term mental health patients: percent of patients hospitalized for 365 consecutive days or longer who undergo a fecal occult blood test			16%	14%	19%	34%	51%	61%
Long-term mental health patients: percent of female patients hospitalized for 365 consecutive days or longer with documentation of a mammogram in the last two years			22%	26%	48%	50%	55%	46%
Percentage of patients who underwent cognitive screening during hospitalization and which was documented in the discharge letter					72%	77%	87%	89%
<b>Emergency Department</b>								
Time from arrival at Emergency Department to clinical triage					10 min.	10 min.	9 min.	9 min.



חטיבת הבריאות  
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Health Services Research

משרד  
הבריאות  
לחיים בריאים יותר

The rate of Emergency Department readmissions within 48 hours						5.4%	5.5%	5.5%
<b>Neonatology</b>								
Percent of preterm deliveries with administration of at least one course of Antenatal Corticosteroid				95%	97%	98%	99%	99%
Percent of preterm neonates who had a body temperature of at least 36°C upon arrival in the neonatal intensive care unit					55%	71%	86%	90%

### Legend:

**Red** – Did not reach the compliance target (for that year).

**Green** – Reached the compliance target (for that year).

**No Background** – Compliance target was not set.