

Table 3. Key Performance Indicators for April 2016 from a medium size children hospital and a medium size clinic

| Category 1: Indicators of Quality Subcategory: Errors | | | | | |
|--|--|--|-----------|-------------------|--------------------|
| Objective | Indicator | Metrics | Frequency | Children Hospital | Medium Size Clinic |
| Minimize unanswered calls to internal consulting physicians | Calling rate to internal consulting physicians with no response | Nº unanswered calls/ Nº calls made | Monthly | NI | NI |
| Minimize errors (negligence) | Reported error rate in medical and nursing procedures | Nº of adverse event reports / Nº of treatments | Annual | 7 | 0 |
| Minimize treatment errors in diagnosis support | Error rate in activities supporting diagnosis (tests requests, results, handling of samples, others) | Nº of irrelevant supporting activities / Nº supporting activities requested | Monthly | NI | 0 |
| Minimize readmission for the same or similar pathology | Patient readmission rate | Nº of patients that seek attention again for the same or similar pathology within 72 hours / Nº treated patients | Monthly | 7% | 1.1% |
| Minimize nosocomial infections | Intrahospital infection rate | Number of nosocomial infections /Total Nº of patients | Monthly | NI | 0 |
| Minimize rate of deceased patients while waiting for hospitalization | Rate of deceased patients waiting to be hospitalized | Nº patients deceased while waiting for hospitalization/ Nº patients with hospitalization order | Monthly | 0 | NI |
| Minimize occurrence of sentinel events | Rate of sentinel events | Nº of patients with sentinel events/Nº total of patients | Monthly | 0 | 0.04% |
| Minimize complication rate | Rate of medical complications* | Nº patients with complications / Nº total treatments | Monthly | 2% | NI |
| Minimize patient accident rate | Patient accident rate (falls or others) | Nº patient accidents/ Nº total treatments | Monthly | 0 | 0.02% |
| Minimize personal accident rate | Personal accident rate (medical sharps , splatters) | Nº personal accidents/ Nº total treatments | Monthly | 0 | 0 |
| Minimize medication error rate | Medication error rate | Nº of memos sent by mistake in a patient's medication/Nº total of patients | Monthly | 0.00% | 0.02% |
| Minimize non-relevant categorization rate | Non-applicable hospitalization rate | Nº of C4 and C5 patients that are hospitalized / Nº of C4 and C5 patients | Monthly | 2% | 1% |
| Minimize non-applicable referral rate of school accidents | Applicable referral rate due to school accidents | Nº patients with school accidents (C1, C2 y C3) / Nº of patients with school accidents | Monthly | NI | NI |

| Subcategory: Standard Compliance | | | | | |
|---|---|---|-----------|------|-------|
| Complying with time standards according to patient classification | Standard compliance rate of treatment times according to triage classification C1 | Nº of patients that comply with the standard /Nº of patients | Monthly | 100% | 100% |
| | Standard compliance rate of treatment times according to triage classification C2 | Nº of patients that comply with the standard /Nº of patients | Monthly | 100% | 63% |
| | Standard compliance rate of treatment times according to triage classification C3 | Nº of patients that comply with the standard /Nº of patients | Monthly | 92% | 96% |
| | Standard compliance rate of treatment times according to triage classification C4 | Nº of patients that comply with the standard /Nº of patients | Monthly | 99% | 100% |
| | Standard compliance rate of treatment times according to triage classification C5 | Nº of patients that comply with the standard /Nº of patients | Monthly | 100% | 100% |
| Complying with standard triage classification time (10 min.) | Standard compliance time of triage classification times | Nº of patients that comply with the standard /Nº of patients | Monthly | 81% | 100% |
| Complying with guides and clinical protocols | Existence of unit protocols | Nº of existing protocols according to clinical manuals | Annual | 1 | 20 |
| Complying with ministry requirements | Getting quality certificates or renewing quality certificates | Nº of times a quality certification has been awarded | Annual | 1 | 2 |
| Subcategory: Staff Satisfaction | | | | | |
| Decrease number of litigations | Litigations | Nº of litigations | Annual | 0 | 0 |
| Decrease complaint rate | Complaint rate | Nº of complaints per triage classification/Nº of patients per Triage categorization | Quarterly | NI | 0.02% |
| Increase staff satisfaction | Average rate of staff satisfaction | Average of satisfaction survey answers/ Nº total surveyed staff | Annual | NI | NI |
| Decrease quit or transfer rates | Average quit or transfer rates by request | Nº of people that quit or are transferred by request/ Nº total of staff | Annual | 2% | 2% |
| Increase trained staff | Training rate (RSP) | Nº of trained staff (RSP)/Nº total staff | Annual | 43% | 33% |
| | Training rate (Infectious IAAS) | Nº of trained staff (IAAS)/Nº total staff | Annual | 33% | 48% |

* measured by changes in categories of higher complexity

Note: NI (no information) is information that at the time of the application in the ED was collected either by other departments and it was not available or never collected.

Table 3. Key Performance Indicators for April 2016 from a medium size children hospital and a medium size clinic (continued)

| Category 2: Temporal Indicators Subcategory: Waiting Time | | | | | |
|--|---|--|-----------|-------------------|--------------------|
| Objective | Indicator | Metrics | Frequency | Children Hospital | Medium Size Clinic |
| Minimize time | Average admission waiting time | (Admission start time - Patient arrival time)/Nº of patients | Monthly | 0:01:08 | NI |
| Minimize time | Average triage waiting time | (Triage start time - Admission end time)/Nº of patients | Monthly | 0:08:19 | 0:07:18 |
| Minimize time | Average examination room waiting time | (Admission time of patient to examination room - Triage end time) / N° of patients admitted into examination room | Monthly | 0:32:31 | 0:08:36 |
| | Average examination room waiting time for C1 patients | (Admission time of patient to examination room - Triage end time) / N° of patients admitted into examination room | Monthly | 0:00:00 | 0:00:35 |
| | Average examination room waiting time for C2 patients | (Admission time of patient to examination room - Triage end time) / N° of patients admitted into examination room | Monthly | 0:12:00 | 0:10:48 |
| | Average examination room waiting time for C3 patients | (Admission time of patient to examination room - Triage end time) / N° of patients admitted into examination room | Monthly | 0:24:04 | 0:09:43 |
| | Average examination room waiting time for C4 patients | (Admission time of patient to examination room - Triage end time) / N° of patients admitted into examination room | Monthly | 0:39:38 | 0:14:18 |
| | Average examination room waiting time for C5 patients | (Admission time of patient to examination room - Triage end time) / N° of patients admitted into examination room | Monthly | 0:41:00 | 0:07:34 |
| Minimize time | Average waiting time to arrive to the internal consulting physician | (Time of arrival to internal consulting physician- Calling time of internal consulting physician)/Nº of patients cared for by consulting physician | Monthly | NI | NI |
| Minimize time | Average waiting time for medical procedure | (Procedure start time – Procedure request time)/Nº of patients under procedure | Monthly | 0:14:45 | 0:18:40 |
| | Average waiting time for nursing procedure | (Procedure start time – Procedure request time)/Nº of patients under procedure | Monthly | 0:16:18 | NI |
| Minimize time | Average waiting time for activities that support the diagnosis | (Start time supporting activities – Order time of supporting activities)/Nº number of supporting activities requested | Monthly | 0:15:15 | NI |
| Minimize time | Average waiting time for results of supporting activities | (Delivery time of results– End time of supporting activities)/Nº of supporting activities requested | Monthly | 0:09:12 | NI |
| Minimize time | Average waiting time for medical discharge | (Real time of discharge- Time of discharge decision) / N° of discharged patients | Monthly | 0:06:51 | 0:35:07 |

| | | | | | |
|--|---|--|---------|---------|---------|
| Minimize time | Average waiting time for internal and external transfer | (Real time of transfer – Time of transfer request)/N° of transferred patients | Monthly | NI | NI |
| Minimize time | Average waiting time for bed hospitalization | (Hospitalization time- Discharge order time) /N° of hospitalized patients | Monthly | 0:03:00 | NI |
| Minimize time | Average waiting time (total) | (Average patient cycle time – average patient treatment time) / N° of discharged patients | Monthly | 0:48:17 | 0:20:32 |
| Subcategory: Processing time | | | | | |
| Improve resource allocation | Average resuscitation time | Total time resuscitation / N° patients requiring resuscitation | Monthly | NI | 2:24:08 |
| Minimize admission process time (collection) | Average admission time (collection) | (Admission end time (collection) - Start time admission (collection))/N° of patients | Monthly | 0:02:22 | NI |
| Improve resource allocation | Average triage time | (Triage end time– Triage start time)/N° of patients | Monthly | 0:04:43 | NI |
| Improve resource allocation | Average examination room time | (Examination room exit time– Examination room start time)/N° of patients admitted into the treatment examination room | Monthly | 0:17:40 | 1:43:37 |
| Improve resource allocation | Average treatment time by internal consulting physician | (End time internal consulting physician care – Star time internal consulting physician care)/N° of patients cared for by internal consulting physician | Monthly | NI | NI |
| Improve resource allocation | Average time for medical procedure | (End time procedure - Start time procedure)/N° of patients under procedure | Monthly | 0:13:05 | 0:19:14 |
| | Average time for nursing procedure | (End time procedure - Start time procedure)/N° of patients under procedure | Monthly | 0:21:43 | 0:18:45 |
| Minimize time of activities supporting diagnosis | Average time of activities supporting diagnosis | (End time supporting activity – Start time supporting activity)/N° of supporting activities requested | Monthly | 0:06:39 | 0:22:27 |
| Minimize average time of cycle | Average cycle time of patient per category | (Real time of discharge - Admission time) / N° of discharged patients | Monthly | 1:38:42 | 2:30:39 |
| Improve resource allocation | Average medical treatment time | (Time discharge was decided - Time of medical assessment) / N° of discharged patients | Monthly | 0:50:27 | 1:36:13 |

*Note: waiting time for all supporting activities, such as blood test and x-rays, are included

Table 3. Key Performance Indicators for April 2016 from a medium size children hospital and a medium size clinic (continued)

| Category 3: Economic indicators | | | | | |
|--|---|--|------------------|-------------------|--------------------|
| Subcategory: Cost | | | | | |
| Objective | Indicator | Metrics | Frequency | Children Hospital | Medium Size Clinic |
| Minimize resuscitation cost | Cost for resuscitation activities | Total cost for resuscitation activities | Monthly | NI | 399 USD |
| Minimize admission cost | Cost for admission activities | Total cost for admission activities | Monthly | NI | 1.237 USD |
| Minimize triage cost | Cost for triage activities | Total cost for triage activities | Monthly | NI | 2.360 USD |
| Minimize cost of primary medical attention | Cost for primary medical treatments | Total cost for primary medical treatments | Monthly | NI | 20.196USD |
| Minimize calling cost and of the internal consulting physician's visit | Cost for calling activity and visit of internal consulting physician | Total cost for calling activity and visit of internal consulting physician | Monthly | NI | NI |
| Minimize cost of medical and nursing procedure | Cost for medical and nursing procedure activities | Total cost for medical and nursing procedure activities | Monthly | NI | 47.518USD |
| Minimize cost of diagnosis support | Cost of activities that support diagnosis | Total cost of activities that support diagnosis | Monthly | NI | 29.743USD |
| Minimize cost of diagnosis revision | Cost of diagnosis review activities | Total cost of diagnosis review activities | Monthly | NI | NI |
| Minimize cost of patient discharge | Cost for patient discharge activities | Total cost for patient discharge activities | Monthly | NI | 30.377USD |
| Minimize cost of logistic support | Cost for logistic support activities | Total cost for logistic support activities | Monthly | NI | 6.047 USD |
| Minimize cost of maintenance and cleaning activities | Cost for maintenance and cleaning activities | Total cost for maintenance and cleaning activities | Monthly | NI | NI |
| Minimize average patient cost | Average patient cost per category | Total cost of patients treated by category/ N° of patients discharged by category | Monthly | NI | NI |
| Subcategory: Financial | | | | | |
| Decrease accounts payable | Outstanding patient accounts (public system-FONASA) | N° of outstanding patient collection accounts/N° of accounts billed to patients | Quarterly | 40% | 1% |
| | Outstanding patient accounts (private system-ISAPRE / out-of-pocket payment)) | N° of outstanding patient collection accounts/N° of accounts billed to patients | Quarterly | 81% | |
| Stick to the budget | Budget implementation | Budget implemented / budget | Annual / Monthly | 101% | 45% |
| Increase patients with regularized financial situation | Rate of patients that regularize their financial situation | N° of patients that regularize their collection situation / N° of patients that received their first medical treatment | Monthly | NI | 0.13% |

Note 1: The cost subcategory should include costs separated by activities if an Activity Based Costing system is implemented in the hospital.

Note 2: NI (no information) is information that at the time of the application in the ED was collected either by other departments and it was not available or never collected.

Note 3: Equivalence 1 US Dollar = 660 Chilean Pesos

Table 3. Key Performance Indicators for April 2016 from a medium size children hospital and a medium size clinic (continued)

| Category 4: Capacity indicators | | | | | |
|--|--|--|-----------|-------------------|--------------------|
| Subcategory: Supply | | | | | |
| Objective | Indicator | Metrics | Frequency | Children Hospital | Medium Size Clinic |
| Control asset quantity | | | | | |
| Technical instruments: Infusion pump, Defibrillator, Vital sign monitor, Notebook, Ophthalmoscope, Weighing scale, Saline stand, Measuring rod, Refrigerated glass display, etc. Furniture for operating services: Weighing scale, Room divider, Stretcher, Stretcher to transport patients, Clinical cart, Cradle, Footstool, Lamp of procedure, Overbed table, Light box, etc. | Quantity of assets | N° assets breakdown according to availability at emergency unit | Biannual | 198 | 81 |
| Control use of assets to support diagnosis | Use of diagnosis support | Asset use / asset capacity | Monthly | NI | NI |
| Control availability and use of cots, wheelchairs and beds | Use (cots, wheelchairs, beds) | Asset use / asset capacity | Monthly | NI | 100% |
| Minimize non-available equipment | Non-available equipment | N° of non-available equipment / N° of equipment | Monthly | 0 | 0% |
| Ensure minimum staff endowment | Staff endowment per shift (physicians, nurses, paramedic and others) | N° of staff members per available emergency unit | Monthly | 23 | 25 |
| Minimize absenteeism rate | Absentee rate (physicians, nurses, paramedic and others) | Hours of medical leave / (Work schedule x N° workers Emergency unit) | Monthly | 1.8% | 0% |
| Minimize staff overtime rate | Weekly overtime work rate (physicians, nurses, paramedic and others) | N° of workers that worked over 48 hours per week / (N° of weeks x N° of full time workers) | Monthly | 17% | 25% |
| Subcategory: Demand | | | | | |
| Control occupation rate | Average daily census | N° of patients per day at emergency unit | Daily | 158 | 184 |
| Control morning patient rate | Patient rate per morning | N° of patients admitted in shift from 08:01 to 14:00 / Total patients in 24hrs | Daily | 36% | 31% |
| Control evening patient rate | Patient rate per evening | N° of patients admitted in shift from 14:01 to 20:00 / Total patients in 24hrs | Daily | 41% | 40% |
| Control night patient rate | Patient rate per night | N° of patients admitted in shift from 20:01 to 08:00 / Total patients in 24hrs | Daily | 23% | 29% |

Table 3. Key Performance Indicators for April 2016 from a medium size children hospital and a medium size clinic (continued)

| Category 5: Outcome indicators | | | | | |
|---|---|---|-----------|-------------------|--------------------|
| Subcategory: Effectiveness | | | | | |
| Objective | Indicator | Metrics | Frequency | Children Hospital | Medium Size Clinic |
| Control number of hospitalized patients | Rate of hospitalized patients | N° of hospitalized patients / N° total patients | Monthly | 9% | 23% |
| Control number of discharge patients | Discharged patients | N° discharged patients/ N° total patients | Monthly | 91% | 63% |
| Minimize total withdrawal rate | Total abandonment rate | (N° admitted patients - N° patients discharged/ referred/ hospitalized)/ N° total admitted patients | Monthly | 22% | 23% |
| Minimize withdrawal rate after triage | Total abandonment rate after triage | (N° triage patients - N° discharged patients) / N° total triage patients | Monthly | 21% | 21% |
| Control number of referred patients | Rate of referred patients | N° referred patients / N° total patients | Monthly | 0% | 14% |
| Minimize short-term mortality | Short-term mortality, after visit to the ER | Short term mortality (7 days)after an emergency visit | Monthly | NI | NI |
| Subcategory: Patient Satisfaction | | | | | |
| Increase patient satisfaction | Average patient satisfaction rate | Average of satisfaction surveys answered/N° total of patients surveyed | Monthly | NI | NI |

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