Cancer Care Planning and Management Obtained from on Hospital-Based Cancer Registries Indicators

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INTRODUCTION

Cancer registries, especially hospital-based cancer registries (HBCR), have performed an important role as a support tool for the development of Brazilian National Cancer Control Policy, including evaluation and monitoring of the quality of care for the cancer patient, hospital planning and support for scientific research. A summary of measures (indicators) of selected characteristics of the cancer patient health status, of the health service personnel performance, and of the quality of the information are used in order to facilitate measurements and evaluation of cancer care.

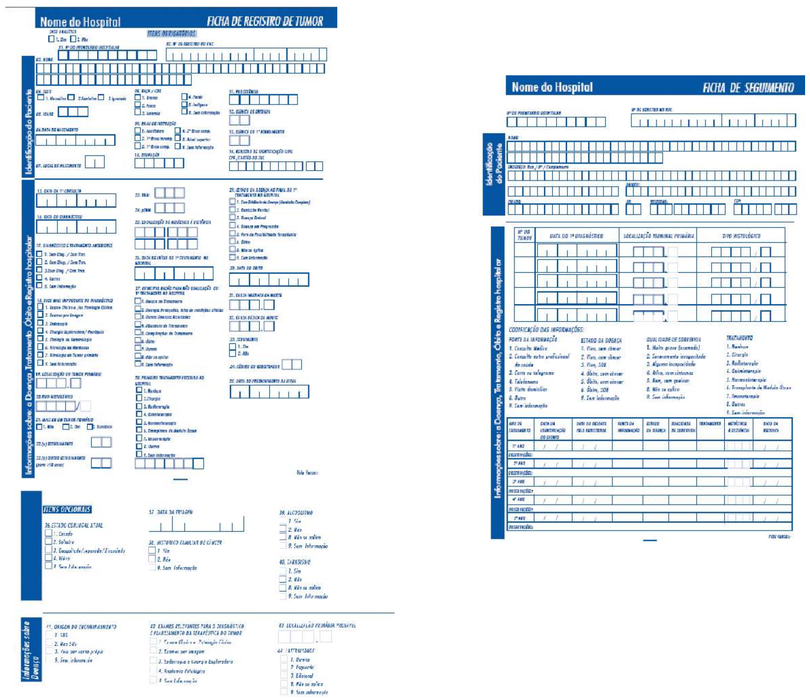
OBJECTIVE

To present indicators that can be used as a supplemental tool to measure and monitor the quality of care delivered for cancer patients in hospitals that provide cancer diagnosis, treatment and follow up.

METHODS

This study consisted in the building up of indicators from the data available from the HBCR, to measure and monitor the quality of care for the cancer patient, as well as to evaluate quality of service within the HBCR. As a proposal of participation on the improvement process of Brazilian Information Systems, potential indicators were developed, which for organizational purposes were divided by area of application.

TUMOUR DATA FORMS(HBCR Variables)



RESULTS

Group I - Indicators for decision makers by hospital management

I.1 - % malignant cases (percentage of cases with diagnostics of malignant tumor in their patients attended)
= Nº of cases registered in HBCR (analytic+non analytic) x 100
Nº of cases registered in a hospital / year of register

I.2 - % of cases by sex (composition of the patients attended and if it is in accord with their hospital characteristics)
= Nº of cases included in HBCR database by female/male x 100
Nº of cases included in HBCR database / year of register

I.3 - % of cases in children/teenagers (composition of the patients attended and if it is in accord with their hospital characteristics)
= Nº of cases included in HCBR database with < 18 years old x 100
Nº of cases included in HCBR database / year of register

I.4 - % of cases without information by defined variable (magnitude of the lack of information in a hospital record)
= Nº of cases without information in a defined variable x 100
Nº of cases included in HBCR database / year of register

I.5 - % of cases that initiated a scheme of diagnostic and treatment (magnitude of cases that arrived to a hospital for diagnostic and treatment)
= Nº of cases registered without diagnostic and treatment x 100
Nº of cases registered in a hospital /year of regsiter

I.6 - % of cases that initiated a scheme of treatment (magnitude of cases that arrived to a hospital for treatment)
= Nº of cases without diagnostic and treatment + with diagnostic and without treatment x 100
Nº of cases matriculated in a hospital / year of register

I.7 - % of cases by early stage for the disease (condition that patients arrived to a hospital in accord to evolution of disease)
= Nº of cases included in HCBR database in stage 0, I e II x 100
Nº of cases included in HBCR / year of register

I.8 - % of cases by advanced stage of disease evolution (condition of the cases that arrived to a hospital in relation to disease evolution)
= Nº of cases included in HBCR database with III and IV stage x 100
Nº of cases registered in HBCR / year of register

Group II - Indicators for hospital planning and manager

II.1 - % of malignant cases (profile of **diagnostics distribution by the time**)
= Nº of cases included in HCBR database (analitics+non analitics) x 100
Nº of cases recorded in a hospital / year of register

II.2 - % of cases by referral to the hospital (type of institution or professional that referral the patients to the hospital)
= Nº of cases by type of referral x 100
Nº of cases registered / clinics / year of register

II.3 - % of cases by previous assistance for clinic of attending (condition that the patient arrived to the first consult, by clinic)
= Nº of cases by category of diagnostic and treatment previous x 100
Nº of cases registered / clinic / year of register

II.4 - Average/Median of Time since the first consult in the hospital at the diagnostic in the same hospital - General and by clinic of attending (time average until established the diagnostic e how this times are distributed by clinics in a hospital)

II.5 - Average/Median of Time since the diagnostic in the hospital at the beginning the treatment in the same hospital - General and by clinic of attending (time average until beginning the treatment, after the diagnosis, and how this times are distributed by clinics in a hospital)

Group III - Indicators for evaluate the quality of care

III.1 - % of cases with confirmation by anatomy-pathology (more important base for establish the diagnostic and for initiate the treatment is the histology of primary tumor)
= Nº of cases registered with diagnostic of cytology / hematology + histology of primary tumor x 100
Nº of cases recorded / year of register

III.2 - % of cases by type of the first treatment (major **therapeutic** protocols **used in a hospital)**
= Nº of cases by type of the first treatment in a hospital x 100
Nº of cases registered / type of tumor / year of register

III.3 - % of cases by state of the disease after the first treatment in patients that arrived without previous treatment and with early stage of the disease (state of the disease after the first treatment)
= Nº of cases by state of the disease x 100
Nº of cases registered / type of tumor / year of register

III.4 - % of cases by state of the disease after the first treatment within the patients that arrive without treatment and with early stage of the disease
= Nº of cases by state of the disease x 100
Nº of cases registered / stage / type of tumor

III.5 - % of cases by state of the disease after the first treatment within the patients that arrive without treatment and with advanced stage of the disease
= Nº of cases by state of the disease x 100
Nº of cases registered / stage / type of tumor

III.6 - % of cases by reason of non receive the treatment (reason that lead the patients to non receive the treatment in a hospital)
= Nº of cases by reason for non receive the treatment x 100
Nº of cases registered / stage / type of tumor / year of register

III.7 - % of cases with follow-up (patients who are in follow-up in a hospital)
= Nº of cases analytics with follow-up x 100
Nº of cases analytics

III.8 - % of lack the follow-up by year (**magnitude of lack the follow-up by year)**
= Nº of cases with programmed follow-up - Nº of cases with follow-up x 100
Nº of cases with programmed follow-up / year

III.9 - % of death in the first year (**percentage of the death in the first year after the diagnostic)**
= Nº of cases with death in the first year x 100
Nº of cases registered in the first year after the diagnostic

Group IV - Indicators for evaluate the performance of HBCR

IV.1 - Number of cases registered (quantify the production of the team of HBCR) = Σ of cases registered by time

IV.2 - Number of solicitation attended (quantify the volume of solicitation attended by HBCR) = Σ of solicitation attended by time

IV.3 - Number of publication (quantify the volume of information that are published by HBCR) = Σ of publication accomplished by time

IV.4 - Interval of time within register/included in HCBR database (time of delayed on capture the information by the team of HBCR)
= Date of register - Date of matriculation

For hospital specialized on cancer care

IV.5 - % of coverage (quantify the magnitude of the cancer cases captured by the HBCR within the cases attended in a hospital)
= Nº of cases included in HBCR database x 100
Nº of cases recorded

IV.6 - % of concordance for the number of cancer cases (compare the confiability of HBCR information)
= concordance within the nº of cases registered by HBCR and the nº of cases with diagnostics by anatomy-pathology / time defined

CONCLUSION

It is up to the registries coordinators, jointly with their technical team and advisory committee, the mission to explore the potential of the HBCR information by the disclosure of the data, especially, by the employment of the proper indicators, contributing, thus, to consolidate the National Cancer Information System and assuring the return of major investments in working hours and institutional resources for the implantation and implementation of the registry.

REFERENCES

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Projeto Gráfico: Seção de Produção de Material Educativo / CEDC / INCA

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