## 7.2 Best Practices

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## Best Practice 1 - Body Donation Program

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Best Practice 1 - Body Donation Program

Department of Anatomy
Department of Anatomy

Title of the practice: Body Donation Program

Aim: Aim of the program is to create awareness among general population about whole body donation for the purpose of medical education and research.

Objectives of the Practice:
1. To help relatives of body donor to fulfil the last wish
2. To arrange vehicle to receive donor at the earliest and embalm it.
3. To provide cadavers for dissection and for Cadaveric workshop.
4. To conduct research on cadavers
5. To prepare specimens for Anatomy Museum

The Context: The institute is located in rural part of Nagpur. People in surrounding region are not much aware about body donation. First MBBS students learn anatomy and dissection is the integral part of studying anatomy. More than a book cadavers teach them. They are the silent mentors and first teacher of the students. During covid 19 there was a shortage of cadavers. Hence the body donation awareness program was started so that we can offer better learning environment to the students.

The Practice: The motivation of public for body donation is the first step in body donation awareness program. We conducted awareness program in rural and urban areas and distributed body donation forms. Two NGO’s joined hands with us. We provide donor card to the people who submit the body donation form of the institute. After death, we provide free ambulance service 24X7 to the relatives of body donor. Application from close relatives, Death certificate of deceased, Aadhar card of donor and relatives are required at the time of donation. Certificates are given to the relatives. Thanks giving program is arranged after body donation.

Evidence of Success: Body donation awareness program started from September 2021. Within a period of 15 months, we received 15 body donations.

Problems encountered and resources required: Initially arranging people for the awareness program was difficult but with the help of NGO’s we could manage it.
Resources required – Vehicle, LCD Projector, Screen, Body donation forms, Banners and Mike system.
Body donation & Organ donation awareness programs conducted by Dept. of Anatomy
Body donation awareness program for Non- teaching staff at LMH

28-9-21
Department of Anatomy

Report on “Body Donation Awareness Program”

Department of Anatomy organized a ‘Body Donation Awareness Program‘ for non teaching staff on Tuesday 28/09/2021 from 2-3 pm in Anatomy department. One clerk / technician from each department was deputed. It was attended by 20 staff members.

Dr. D. P. Onkar, Professor & HOD conducted the session & participants were sensitized about the body donation. Body donation is the highest level of charity & it is a true altruism. Due respect should be given to the donors. Current scenario and the need for body donation was discussed. Queries from the participants were solved.
BODY DONATION
PUBLIC AWARENESS PROGRAM AT
ISSASANI 29-6-22
DEPARTMENT OF ANATOMY

Report

Department of Anatomy organised Body Donation Awareness Program for general public on 29/06/2022 at Gram Panchayat, Isasani village. Mr. Vishwajit Paikrao co-ordinated the event. Dr. Anant Fulse gave brief introduction about the program. Dr. Deepali Onkar HOD Anatomy described the need and the purpose of body donation in detail. 25 participants attended the program.

Body Donation Awareness Program at Gram Panchayat, Isasanis on 29th June 2022 by Dept. of Anatomy
Body donation & Organ donation
Public awareness program
Wadi-18-8-22
DEPARTMENT OF ANATOMY

Report on Body Donation and Organ Donation awareness program

Department of Anatomy, NKP Salve Institute of Medical Sciences & Research Centre, and Lata Mangeshkar Hospital, Nagpur organized Body Donation and Organ Donation Awareness Program for general public on 11/8/2022 from 1PM to 4 PM at Pradhnyasheel Buddha Vihar, Mandpe Layout, Wadi, Nagpur.

Dr. D.P. Onkar described the need of body donation through power point presentation and stressed that more & more people should make a will of body donation for the purpose of Medical Education & Research. Dr. Sushil Meshram, a social worker from Seva Dal Women College was chief guest for the function. He explained about organ and tissue donation through examples.

Thirty participants attended the program. Twenty people pledged for body donation after the program and submitted the forms. All the departmental staff members attended the program. Mr. Suresh Uike, social worker and Dr. R.N. Dehankar, Professor Anatomy coordinated the program.
LIST OF THE BODY DONERS
# DEPARTMENT OF ANATOMY

## LIST OF THE DONORS, WHO HAVE DONATED THEIR BODY FOR MEDICAL EDUCATION AND RESEARCH

<table>
<thead>
<tr>
<th>SR.NO.</th>
<th>Date of Receiving Body</th>
<th>Name of Person &amp; Address</th>
<th>Age &amp; Sex (M/F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>11/11/2021</td>
<td>Mrs. Pikholabai Shamrao Taywade&lt;br&gt;Laxminarayan Nagar Mahajanwadi, Wanadongri, Nagpur</td>
<td>84Yrs, Female</td>
</tr>
<tr>
<td>2</td>
<td>09/06/2022</td>
<td>Mrs. Padma Subramanian&lt;br&gt;136, poonam vihar- 1, Indraprastha layout, Swawlambi Nagar, Nagpur -440022</td>
<td>79Yrs, Female</td>
</tr>
<tr>
<td>3</td>
<td>13/06/2022</td>
<td>Mrs. Kausalya Sambaji Sayare&lt;br&gt;R/o Dwarka nagari,Anandwan square, Anandwan,Warora, Chandrapur-442914</td>
<td>88Yrs, Female</td>
</tr>
<tr>
<td>4</td>
<td>25/06/2022</td>
<td>Mrs. Sawitribai Durgadasji Rakshak&lt;br&gt;R/o Gali No. 15, Gurudeo Kiranabhandar, near Anjani Police Station, Vishwakarma nagar, Nagpur</td>
<td>85Yrs, Female</td>
</tr>
<tr>
<td>5</td>
<td>06/08/2022</td>
<td>Mr.Ravindra Wagle&lt;br&gt;R/o B-1 Bhima Apartment Arohi Bharat nagar, Behind Ambazari police station Amravati Road, Nagpur</td>
<td>87Yrs, Male</td>
</tr>
<tr>
<td>6</td>
<td>12/08/2022</td>
<td>Mrs. Sushilabai Shashikant Bhalgat&lt;br&gt;R/o Main Road, Vallabh Bhai Patel Ward, Bhandara – 441904</td>
<td>70Yrs, Female</td>
</tr>
<tr>
<td>7</td>
<td>23/08/2022</td>
<td>Mrs. Panchfula Vishwas Tale&lt;br&gt;R/o Dipori Wadgaon Rajdi, Amravati, Maharashtra, 444709</td>
<td>73Yrs, Female</td>
</tr>
<tr>
<td>8</td>
<td>02/09/2022</td>
<td>Mrs. Smita Vinayak Kanetkar&lt;br&gt;R/o Plot No. 7, Bhaskar Apts, Bajaj Nagar, Nagpur, Maharashtra, 440010</td>
<td>83Yrs, Female</td>
</tr>
<tr>
<td>9</td>
<td>19/09/2022</td>
<td>Mr. Viddyadhar Sharatchandra Ranade&lt;br&gt;R/o Plot No. 172, Dhanlaxmi apartment, Near Chhatrapati Sabhagruh, Chhatrapati Nagar, Nagpur, Maharashtra, 440015</td>
<td>90Yrs, Male</td>
</tr>
<tr>
<td>10</td>
<td>08/10/2022</td>
<td>Smt. Suman Ganpatrao Shende&lt;br&gt;R/o. 40 Ladikar layout, Manewada Road, Nagpur - 24</td>
<td>80 Yrs, Female</td>
</tr>
<tr>
<td>11</td>
<td>10/10/2022</td>
<td>Mrs. Vanlata Arun Huddar&lt;br&gt;R/o. Plot No. 120 Shubhangi Layout, Khamla Road, Near Raut Hospital, Pande Layout, Khamla, Khamla, Nagpur - 440025</td>
<td>84Yrs, Female</td>
</tr>
<tr>
<td></td>
<td>Date</td>
<td>Name and Address</td>
<td>Age</td>
</tr>
<tr>
<td>---</td>
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<td>----------------------------------------------------------------------------------</td>
<td>-----</td>
</tr>
<tr>
<td>12</td>
<td>13/10/2022</td>
<td>Mrs. Nalini Manohar Kanetkar R/o. Plot No. 90 Behind Joshi Chakki, Swawalambi Nagar, Ranapratap Nagar, Nagpur - 440022</td>
<td>92Yrs</td>
</tr>
<tr>
<td>13</td>
<td>30/10/2022</td>
<td>Mrs. Sumitra Kaliram Gaikwad C/o. Kaliram Kashiram Gaikwad, Behind Tahsil Office, Bardi, Armori, District - Gadchiroli - 441208</td>
<td>62Yrs</td>
</tr>
<tr>
<td>14</td>
<td>18/11/2022</td>
<td>Smt. Susheela Manikrao Dhanpalwar R/o. 3-4 -1013/19, Rajendra Colony, Barkatpura Himayathnagar, Station Kachiguda, Hyderabad, Telangana – 500027 C/o. Shrikant Manikrao Dhanpalwar, R/o. 204 Kuber Regency, Congress Nagar, Patwardhan Ground, Nagpur. Maharashtra – 440012.</td>
<td>84Yrs</td>
</tr>
<tr>
<td>15</td>
<td>19/12/2022</td>
<td>Ku. Lata Mahadeo Patil R/o. Near Buddha Putla, Galli No. 1, Kunjilal Peth, Bhagwan Nagar, Nagpur- 440027. Maharashtra</td>
<td>64Yrs</td>
</tr>
</tbody>
</table>

Dr. Deepali P. Onkar
Professor & HOD Anatomy
NKP SIMS & RC and LMH, Nagpur
PHOTOGRAPHS TAKEN WHILE OFFERING CERTIFICATE TO RELATIVES OF BODY DONERS
Certificates issued to relatives of body donors
DEPARTMENT OF ANATOMY

No. NKP SIMS/ Anat./ Cert./ 15 /2021 Date: 11/11/ 2021

CERTIFICATE

Govt. of Maharashtra by its notification No. MED-190/3589/MED-4(A) dated 01.08.1990 has declared this institution as an approved institution for the purpose of Anatomical Act.

This department has received donated body (cadaver) of Mrs. Pikholabai Shamrao Taywade, Aged 84Yrs Female, Laxminarayan Nagar Mahajanwadi, Wanadongri, Nagpur - on 11/11/ 2021, along with the Death Certificate.

THIS DONATED BODY (CADAVER) WILL BE USED FOR TEACHING PURPOSES.

[Signature]

DR. DEEPALE P.ONKAR
HOD, DEPT. OF ANATOMY

DR. DEEPALE ONKAR
PROFESSOR & HOD
Department of Anatomy
N.K.P. Salve Institute of Medical Sciences & Research Centre and Lata Mangeshkar Hospital, Nagpur
DEPARTMENT OF ANATOMY

No. NKP SIMS/ Anat./ Cert./ 50 /2022

Date: 09/06/2022

CERTIFICATE

Govt. of Maharashtra by its notification No. MED-190/3589/MED-4(A) dated 01.08.1990 has declared this institution as an approved institution for the purpose of Anatomical Act.

This department has received donated body (cadaver) of Mrs. Padma Subramanian Aged 79Yrs, Female, 136, poonam vihar- 1, Indraprastha layout, Swawlambi Nagar, Nagpur -440022, on 08/06/2022, along with the Death Certificate.

THIS DONATED BODY (CADAVER) WILL BE USED FOR TEACHING PURPOSES.

DR. DEEPALI P. ONKAR
PROFESSOR & HOD.
DEPT. OF ANATOMY

DR. DEEPALI ONKAR
PROFESSOR & HOD.
Department of Anatomy
N.K.P. Salve Institute of Medical Sciences & Research Centre and
Lata Mangeshkar Hospital, Nagpur
DEPARTMENT OF ANATOMY

No. NKP SIMS/ Anat./ Cert./ 16 /2022 Date: 13/06/ 2022

CERTIFICATE

Govt. of Maharashtra by its notification No. MED-190/3589/MED-4(A) dated 01.08.1990 has declared this institution as an approved institution for the purpose of Anatomical Act.

This department has received donated body (cadaver) of Mrs. Kausalya Sambaji Sayare, Aged 88Yrs, Female, R/o Dwarka nagari, Anandwan square, Anandwan, Warora, Chandrapur-442914, on 13/06/ 2022, along with the Death Certificate.

THIS DONATED BODY (CADAVER) WILL BE USED FOR TEACHING PURPOSES.

DR. DEEPALI P. ONKAR
PROFESSOR & HOD.
DEPT. OF ANATOMY

[Signature]

DR. DEEPALI ONKAR
PROFESSOR & HOD
Department of Anatomy
N.K.P. Salve Institute of Medical Sciences & Research Centre and
Lata Mangeshkar Hospital, Nagpur
DEPARTMENT OF ANATOMY

CERTIFICATE

Govt. of Maharashtra by its notification No. MED-190/3589/MED-4(A) dated 01.08.1990 has declared this institution as an approved institution for the purpose of Anatomical Act.

This department has received donated body (cadaver) of Mrs. Sawitribai Durgadasji Rakshak, Aged 85Yrs, Female, R/o Gali No. 15, Gurudeo Kiranabhandar, near Anjani Police Station, Vishwakarma nagar, Nagpur, on 25/06/ 2022, along with the Death Certificate.

THIS DONATED BODY (CADAVER) WILL BE USED FOR TEACHING PURPOSES.

DR. DEEPALE P. ONKAR
PROFESSOR & HOD.
DEPT. OF ANATOMY

DR. DEEPALE ONKAR
PROFESSOR & HOD
Department of Anatomy
N.K.P. Salve Institute of Medical Sciences & Research Centre and Lata Mangeshkar Hospital, Nagpur
DEPARTMENT OF ANATOMY

No. NKP SIMS/ Anat./ Cert./ 51 /2022

Date: 06/08/2022

CERTIFICATE

Govt. of Maharashtra by its notification No. MED-190/3589/MED-4(A) dated 01.08.1990 has declared this institution as an approved institution for the purpose of Anatomical Act.

This department has received donated body (cadaver) of Mr. Ravindra Wagle, Aged 87 Yrs, Male, R/o B-1 Bhima Apartment Arohi Bharat nagar, Behind Ambazari police station Amravati Road, Nagpur – 33, on 06/08/2022, along with the Death Certificate.

THIS DONATED BODY (CAD AVER) WILL BE USED FOR TEACHING PURPOSES.

DR. DEEPA LI P. ONKAR
PROFESSOR & HOD.
DEPT. OF ANATOMY

Department of Anatomy
N.K.P. Salve Institute of Medical Sciences & Research Centre and Lata Mangeshkar Hospital, Nagpur
No. NKP SIMS/ Anat./ Cert./ 18 /2022

Date: 12/08/2022

DEPARTMENT OF ANATOMY

CERTIFICATE

Govt. of Maharashtra by its notification No. MED-190/3589/MED-4(A) dated 01.08.1990 has declared this institution as an approved institution for the purpose of Anatomical Act.

This department has received donated body (cadaver) of Mrs. Sushilabai Shashikant Bhalgat, Aged 70Yrs, Female, R/o Main Road, Vallabh Bhai Patel Ward, Bhandara –441904 on 12/08/2022, along with the Death Certificate.

THIS DONATED BODY (CADAVER) WILL BE USED FOR TEACHING PURPOSES.

DR. DEEPA L P. ONKAR
PROFESSOR & HOD.
DEPT. OF ANATOMY

Dr. DEEPA L ONKAR
PROFESSOR & HOD
Department of Anatomy
N.K.P. Salve Institute of Medical Sciences & Research Centre and Lata Mangeshkar Hospital, Nagpur.
DEPARTMENT OF ANATOMY

CERTIFICATE

Govt. of Maharashtra by its notification No. MED-190/3589/MED-4(A) dated 01.08.1990 has declared this institution as an approved institution for the purpose of Anatomical Act.

This department has received donated body (cadaver) of Mrs. Panchfula Vishwas Tale, Aged 73 Yrs, Female, R/o Dipori Wadgaon Rajdi, Amravati, Maharashtra, 444709 – on 23/08/2022, along with the Death Certificate.

THIS DONATED BODY (CADAVER) WILL BE USED FOR TEACHING PURPOSES.

[Signature]

DR. DEEPALE P. ONKAR
PROFESSOR & HOD.
DEPT. OF ANATOMY

Department of Anatomy
N.K.P. Salve Institute of Medical Sciences & Research Centre and Lata Mangeshkar Hospital, Nagpur
DEPARTMENT OF ANATOMY

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This department has received donated body (cadaver) of Mrs. Smita Vinayak Kanetkar, Aged 83Yrs, Female, R/o Plot No. 7, Bhaskar Apts, Bajaj Nagar, Nagpur, Maharashtra, 440010 – on 02/09/2022, along with the Death Certificate.

THIS DONATED BODY (CADAVER) WILL BE USED FOR TEACHING PURPOSES.

DR. DEEPALI P. ONKAR
PROFESSOR & HOD.
DEPT. OF ANATOMY

DR. DEEPALI ONKAR
PROFESSOR & HOD
Department of Anatomy
N.K.P. Salve Institute of Medical Sciences & Research Centre and
Lata Mangeshkar Hospital, Nagpur
DEPARTMENT OF ANATOMY

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This department has received donated body (cadaver) of Mr. Viddyadhar Sharatchandra Ranade, Aged 90Yrs, Male, R/o Plot No. 172, Dhanlaxmi apartment, Near Chhatrapati Sabhapruh, Chhatrapati Nagar, Nagpur, Maharashtra, 440015 – on 19/09/2022, along with the Death Certificate.

THIS DONATED BODY (CADAVER) WILL BE USED FOR TEACHING PURPOSES.

DR. DEEPALI P. ONKAR
PROFESSOR & HOD.
DEPT. OF ANATOMY

DR. DEEPALI ONKAR
PROFESSOR & HOD.
No. NKP SIMS/ Anat./ Cert. 2 \ /2022 Date 08th Oct 2022

DEPARTMENT OF ANATOMY

CERTIFICATE

Govt. of Maharashtra by its notification No. MED-190/3589/MED-4(A) dated 01.08.1990 has declared this institution as an approved institution for the purpose of Anatomical Act.

This department has received a cadaver of Smt. SUMAN GANPATRAO SHENDE, 80 Aged years, FEMALE, R/o. 40 Ladikar layout, Manewada Road, Nagpur - 24. On 8th October 2022 along with the Death Certificate.

THIS CADAVER WILL BE USED FOR TEACHING PURPOSES.

[Signature]

DR. DEEPALI P. ONKAR
HOD. DEPT. OF ANATOMY

DR. DEEPALI ONKAR
PROFESSOR & HOD
Department of Anatomy
N.K.P. Salve Institute of Medical Sciences & Research Centre and
Lata Mangeshkar Hospital, Nagpur.
DEPARTMENT OF ANATOMY

CERTIFICATE

Govt. of Maharashtra by its notification No. MED-190/3589/MED-4(A) dated 01.08.1990 has declared this institution as an approved institution for the purpose of Anatomical Act.

This department has received a cadaver of Mrs. Vanlata Arun Huddar, 84 Aged years, Female, R/o. Plot No. 120 Shubhangi Layout, Khamla Road, Near Raut Hospital, Pande Layout, Khamla, Khamla, Nagpur - 440025. On 10th October 2022 along with the Death Certificate.

THIS CADAVER WILL BE USED FOR TEACHING PURPOSES.

DR. DEEPALE P. ONKAR
HOD. DEPT. OF ANATOMY

DR. DEEPALE ONKAR
PROFESSOR & HOD

Department of Anatomy
N.K.P. Salve Institute of Medical Sciences & Research Centre and
Lata Mangeshkar Hospital, Nagpur.
DEPARTMENT OF ANATOMY

CERTIFICATE

Govt. of Maharashtra by its notification No. MED-190/3589/MED-4(A) dated 01.08.1990 has declared this institution as an approved institution for the purpose of Anatomical Act.

This department has received a cadaver of Mrs. Nalini Manohar Kanetkar, aged 92 years, Female, R/o. Plot No. 90 Behind Joshi Chakki, Swawalambi Nagar, Ranapratap Nagar, Nagpur – 440022, on 13th October 2022 along with the Death Certificate.

THIS CADAVER WILL BE USED FOR TEACHING PURPOSES.
DEPARTMENT OF ANATOMY

CERTIFICATE

Govt. of Maharashtra by its notification No. MED-190/3589/MED-4(A) dated 01.08.1990 has declared this institution as an approved institution for the purpose of Anatomical Act.

This department has received a cadaver of Mrs. Sumitra Kaliram Gaikwad, aged 62 years, Female, C/o. Kaliram Kashiram Gaikwad, Behind Tahsil Office, Bardi, Armori, District - Gadchiroli - 441208, on 30th October 2022 along with the Death Certificate.

THIS CADAVER WILL BE USED FOR TEACHING PURPOSES.

DR. DEEPALE P. ONKAR
HOD. DEPT. OF ANATOMY

DR. DEEPALE ONKAR
PROFESSOR & HOD
Department of Anatomy
NKP Salve Institute of Medical Sciences & Research Centre and
Lata Mangeshkar Hospital
Digdoh Hills, Hingna Road, Nagpur – 440 019

Phone (07104) 665000,244291, Fax:(07104) 306111- mail: nkpsims1@rediffmail.com/website : www.nkpsims.in
DEPARTMENT OF ANATOMY

CERTIFICATE

Govt. of Maharashtra by its notification No. MED-190/3589/MED-4(A) dated 01.08.1990 has declared this institution as an approved institution for the purpose of Anatomical Act.

This department has received a cadaver of Smt. Susheela Manikrao Dhanpalwar, aged 84 years, Female, R/o. 3-4 -1013/19, Rajendra Colony, Barkatpura Himayathnagar, Station Kachiguda, Hyderabad, Telangana – 500027, on 18th Nov. 2022 along with the Death Certificate.

THIS CADAVER WILL BE USED FOR TEACHING PURPOSES.

[Signature]

DR. DEEPAI L. ONKAR
HOD. DEPT. OF ANATOMY

Department of Anatomy
N.K.P. Salve Institute of Medical Sciences & Research Centre and
Lata Mangeshkar Hospital, Nagpur
No. NKP SIMS/ Anat./ Cert. 24 /2022

Date 19th Dec. 2022

DEPARTMENT OF ANATOMY

CERTIFICATE

Govt. of Maharashtra by its notification No. MED-190/3589/MED-4(A) dated 01.08.1990 has declared this institution as an approved institution for the purpose of Anatomical Act.

This department has received a cadaver of Ku. Lata Mahadeo Patil, aged 64 years, Female, R/o. Near Buddha Putla, Galli No. 1, Kunjilal Peth, Bhagwan Nagar, Nagpur- 440027. Maharashtra on 19th Dec. 2022 along with the Death Certificate.

THIS CADAVER WILL BE USED FOR TEACHING PURPOSES.

DR. DEEPAI ONKAR
HOD. DEPT. OF ANATOMY

DR. DEEPAI ONKAR
PROFESSOR & HOD
Department of Anatomy
N.K.P. Salve Institute of Medical Sciences & Research Centre and Lata Mangeshkar Hospital, Nagpur
Best Practice 2 - AI Based Software for Xray (CXR)

<table>
<thead>
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<th>S. No.</th>
<th>Particulars</th>
<th>Page no.</th>
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<tbody>
<tr>
<td>1</td>
<td>AI based software for systematic reporting of CXR by Department of Radio diagnosis</td>
<td>36-37</td>
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<tr>
<td>2</td>
<td>Algorithm for reporting of the chest radiographs</td>
<td>38-39</td>
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<td>3</td>
<td>Website for the reporting of Chest Radiographs</td>
<td>40-42</td>
</tr>
<tr>
<td>4</td>
<td>Loan Agreement of Deep-Tech for Artificial Intelligence based solutions</td>
<td>43-45</td>
</tr>
</tbody>
</table>
Department of Radio diagnosis

Best Practice 2 - AI Based Software for Xray (CXR)
BEST PRACTICES IN THE DEPARTMENT OF
RADIODIAGNOSIS (YEAR 2022)

1. Title:
Artificial Intelligence based software for detection of pathologies and systematic reporting of Chest radiographs.

2. Objectives:
- To develop AI based software for systematic and accurate reporting of chest radiographs daily.
- To create a digital image library consisting of findings of reported chest radiographs.

3. The Context:
Reporting of chest radiographs in day to day practice is a challenging task because of complex interpretations and many overlapping structures have to be visualized on 2 dimensional image. Many factors affect the accuracy of reporting including the expertise of radiologist, technical factors, compliance of the patient and expertise of the technician. The idea of development of this algorithm was based on minimizing the errors in diagnosis due to mechanical reasons and human errors.

The template for the algorithm is broadly classified as follows:

1. NORMAL RADIOGRAPHS
2. CONGENITAL PATHOLOGIES
3. NEONATAL PATHOLOGIES
4. INFECTIONS
5. NEOPLASTIC PATHOLOGIES
6. CHEST TRAUMA
7. MISCELLANEOUS PATHOLOGIES
4. **The Practice:**

The main objective of this practice was to develop a systematic approach for reporting of routine chest radiographs in department of radiodiagnosis which gives a proper step by step delineation of pathologies and help the junior residents in reaching at a particular diagnosis in a structured way. We have provided resources to help the residents standardize reporting practices to enhance efficiency, demonstrate value and improve diagnostic quality of chest radiography reporting. The ideal report should be uniform, comprehensive, easy to understand and readable. This study itself is unique since this approach has been carried out for the first time in our institute and has already benefitted the junior residents immensely. We also intend to create a digital library which can serve the purpose of storing such methodically reported radiographs. However, few limitations were encountered in the evaluation of this study especially the technical parameters of the radiograph with few appearing rotated or under/over exposed. Due to this limitation, few pathologies were overlooked and few normal chest radiographs were overdiagnosed. Another limitation faced was the reporting of portable chest radiographs done in emergency or intensive care setting which were usually rotated or taken in mid inspiratory or expiratory phase.

5. **Evidence of success:**

The study has helped many residents in describing findings in a chest radiograph in a proper methodical approach and in reaching an accurate diagnosis which ultimately improves the diagnostic yield of reporting of the same.

6. **Problems Encountered and Resources Required:**

This algorithm however did not prove to be as useful in portable radiographs as it was in the routine setting where modern radiographs are now carried out digitally. As the quality of these portable radiographs is questionable, many of these x-rays are overdiagnosed or underdiagnosed. Hence the resources required for such radiographs should be optimal and they include manual as well as technical factors such as a properly trained technician as well as properly positioned radiographs.

Another important resource required is Picture Archiving and Communication System (PACS) which help in easy reporting and availability of these radiographs.
ALGORITHM FOR REPORTING OF THE CHEST RADIOGRAPHS
ALGORITHM FOR REPORTING OF THE CHEST RADIOGRAPHS

WWW.VIDHARBHARADIOLOGY.COM

Sign up

Self Assessment

Module: Chest X-ray

Assignment: Posteroanterior Chest X-ray

Example: C/o Breathlessness

Choose the following options

Appropriate chest x-ray will be displayed and your findings are to be selected amongst the displayed options.

Maximum 3 attempts can be given

Final score shall be displayed at the end of the session mentioning the accuracy of the findings.
WEBSITE FOR THE REPORTING OF CHEST RADIOGRAPHICS
Vidarbha Chapter (Maharashtra State Branch of Indian Radiological & Imaging Association)

Welcome

Self-assessment

Module: Chest X-ray
Batch Name: Chest X-ray 2021
Assignment Status: Attempts
Start Date: 2022-10-30
End Date: 
Assignment Marks: 
Module Status: applied
Submit Assignment / Retry
Submit Assignment

Section: Posteroanterior x-ray
Assignment Status: 0 Attempts
Assignment Marks: 0
Submit Assignment / Retry
Submit Assignment

This self-assessment course to update your skills.

Offices
One
Two
Three
Four

Solar Systems
One
Two
Three
Four

Contact
- Twitter
- Facebook
- Instagram
- Pinterest

Offices
One
Two
Three
Four

https://mail.google.com/mail/u/0/?tab=rm&ogbl#inbox/FMfctg2GrblhgzwKWjXWphVMkrcLXNQKmb?projector=1&messagePartId=0.1
Q. 1: ICU patient with breathlessness
Number of Attempts: 1
Marks obtained: 69.14

Q. 2: c/o breathlessness
Number of Attempts:
Marks obtained:

Q. 3: Fever for 15 days
Number of Attempts:
Marks obtained:

Q. 4: cough with fever
Number of Attempts:
Marks obtained:

Q. 5: fever
Number of Attempts:
Marks obtained:
LOAN AGREEMENT OF DEEPTECH FOR ARTIFICIAL INTELLIGENCE BASED SOLUTIONS
Loan Agreement for Special AI Based Solutions "WIP" (Works in progress) or "ASP" "Addin / Special Sequence Package" (WIP / ASP) including Dicom Data.

Dear Dr. Avinash Dhok
Head of Department of Radiology
NKPSIMS, Hospital and Research center
Nagpur, Maharashtra
PINCODE 440019
Email: nkpsims1@rediffmail.com
Phone: 07104-244904

We are pleased to provide you on a loan basis with the following Special Work package WIP 1 ASP (LOANED ITEM)

1. Artificial Intelligence tool for detection and categorization of normal and abnormal chest radiographs using deep learning.
2. Notification client software and notification client AI bot engine

for the use in connection with or on your DeepTek system(s)

The loan duration is 6 months, upon date of last signature under this agreement.

As Deliverable under this Agreement, you will provide us with feedback on the evaluation of the WIP/ASP and further information related thereto as described herein.

PURPOSE:
Normal – Abnormal chest radiograph prototype evaluation to:
- Conduct Qualitative assessment of the functionality and workflow.
- Conduct Quantitative assessment of the functionality.
- Provide clinical cases and evidences of evaluation in terms of case summary.csv and the statistics.csv

DESCRIPTION:
DeepTek is developing artificial intelligence (AI) solutions to assist the radiologists in various clinical tasks. DeepTek has developed an AI algorithm that assists the radiographer and the radiologist with the triaging of acute patients. In this collaboration, the clinical partner is enabled to assess modern techniques of workflow improvements that allow for better resource allocation, and shorter time-to-treatment for the patients. DeepTek gets feedback from the clinical partner to include in further algorithm developments to address the clinical needs properly.

- NKPSIMS, Hospital and Research center Nagpur, Maharashtra.(“PARTNER”) hereby nominates as its scientific project managers:
  Dr. Prashant Onkar; Email: nkpsimsradio@gmail.com
- Dr. Amit Kharat for Liaoning between DPU and DeepTek.
- DeepTek hereby nominates as its scientific project managers: Ajit Patil; Email: ajit@deeptek.ai

OFFICE: 4TH FLR, ALACRITY INNOVATION CENTRE, PALLOD FARMS 3, BANER ROAD, PUNE 411045, MH, INDIA
The Parties of this agreement shall during the performance of the WIP evaluation keep in contact through the scientific project managers and shall in case of upcoming problems, specifically if they cannot comply anymore with the time schedule defined in the MILESTONES, determine possible solutions and implement chosen solutions.

The timeline to be discussed on mutual basis and a clinical outcome will be presented as a collaborative research document/presentation/research paper.

**DICOM data:**

Patient study acquired will be post processed using the supplied AI for Normal-Abnormal Detection and classification Prototype stand-alone software of Xray Chest data including and also be reviewed through the provided bot engine as a part of the mobile device.

AP or PA view of chest radiographs

**Data Specification:**

DeepTek will provide a configuration (WIP DICOM profile) that is supposed to support anonymization and its use is recommended. For details, please see the configuration documentation, which will be provided separately.

The following data shall be kept:

- Age of the patients in years
- Sex of the patients
- Date of examination modified by a random value (increment)
- DICOM-UIDs for instance Study instance UID replaced by a hash value.
- Scanner information like manufacturer, modality and other
- Technical data required for the image analysis (e.g., scan protocol) etc.
- Pixel data in relevant studies.

Ajit Patil  
DeepTek Medical Imaging Pvt Ltd

Amit Kharat  
Coordinator

Dr. Avinash Dhok  
HOD, Radiology

Dr. Avinash Dhok  
Professor &  
Department of Radiology

OFFICE: 4TH FLR. ALACRITY INNOVATION CENTRE, PALLOD FARMS 3, BANER ROAD. PUNE 411045, MH