

# Terminal Digit Filing Toolkit

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## **Foreword**

Filing health records is a fundamental component of any health information department. Even though the healthcare industry is quickly moving toward electronic patient records, the accurate filing and subsequent location of legacy paper records are vital components to quality patient care.

This toolkit is intended to provide guidance regarding terminal digit filing of paper records. The location of paper records may no longer be within the walls of the health information management (HIM) department, but rather at an off-site warehouse as the organization transitions to an electronic record. However, the management of these records continues to be important in an organization's day-to-day operations.

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## **Introduction**

HIM departments have historically struggled with the daily function of filing. The total volume of paper records and/or loose sheets can often be overwhelming to the day-to-day processes of the department. Add in the idea of sorting these mountains of incoming work and identifying those with no medical record number and the function quickly becomes time consuming and labor intensive.

Filing records and/or loose sheets is the least liked functions of a clerk and the lowest priority of the department's functions. However, the repercussions of filing backlogs or misfiles could have dramatic effects on patient care. Constantly shifting records to make space for incoming files can result in large amounts of lost clerical time and labor and inefficient record retrieval. As a result, HIM managers have sought ways to improve the process over time.

One way to improve space allocation efforts within the file room is the implementation of terminal digit filing (TDF) processes. The majority of HIM departments utilize TDF systems. The purpose of this toolkit is to identify best practices and develop a staff training document for managers. To train new or existing staff, simply print off the toolkit, review the documentation, complete the exercises, compare the answer sheet and file it in the employee's personnel file.

## **Terminal Digit Filing (TDF)**

Terminal digit filing (TDF) systems are the most often utilized filing methodology within an HIM department or warehouse. TDF is the only way to keep files expanding at an even rate. When trying to maintain a straight numeric filing system it is impossible to predict how much space to allocate to the randomly based file numbers that come into the file room. In a TDF system the last two, three, or four digits of the number is treated as a single number. Since all numbers in the file are sorted by their ending digits, each section contains approximately the same number of folders, so the file shelves are divided for easy expansion.

TDF does not re-create the medical record numbers an organization uses; it is an organizational technique that uses available numbers to divide files into easily located groups.

The benefits of TDF include:

1. Files are equally distributed throughout the file room.
2. File room staff productivity is increased.
3. Shelf and space planning is more efficient.
4. Pre-sorting is easier.
5. Workload assignments are streamlined.
6. Purging is easier.
7. The process works in a large or small department and across specialties.
8. File location is immediate.
9. The process reduces transposed numbers.
10. Multiple numbers can work together (in the case of merger).

## Primary/Secondary and Tertiary Numbers

To understand terminal digit filing, one must first understand the designation of primary, secondary, and tertiary numbers.

Consider the following medical record numbers:

01-00-00

02-00-00

In the first example, 01-00-**00** is the **primary digit**, 01-**00**-00 is the **secondary digit**, and **01**-00-00 is the **tertiary digit**. In the second example, 02-00-**00** is the **primary digit**, 01-**00**-00 is the **secondary digit**, and **02**-00-00 is the **tertiary digit**. Therefore, using what **you have learned previously** to file by primary digit, then secondary, and then tertiary, the medical record numbers would be filed in the following order:

01-00-00

02-00-00

03-00-00

04-00-00

The following is the shelving unit that contains the charts with the primary digits **00**. Each of the lines represents a shelf within that unit. The first shelf, 00-09, is identified with the secondary, or middle two digits. The first shelf in the 00 unit would hold all the health record numbers with middle digits 00-09. The second shelf would hold all the health record numbers with the middle digits of 10-19 and so on.

Shelving Unit 00
00-09
10-19
20-29
30-39
40-49
50-59
60-69
70-79
80-89
90-99

Think of each shelf, then, as divided into 10 sections as below.

Shelving Unit 00									
00	01	02	03	04	05	06	07	08	09
10	11	12	13	14	15	16	17	18	19
20	21	22	23	24	25	26	27	28	29
30	31	32	33	34	35	36	37	38	39
40	41	42	43	44	45	46	47	48	49
50	51	52	53	54	55	56	57	58	59
60	61	62	63	64	65	66	67	68	69
70	71	72	73	74	75	76	77	78	79
80	81	82	83	84	85	86	87	88	89
90	91	92	93	94	95	96	97	98	99

All of the following medical record numbers would be filed in this shelving unit:

- 00-11-00
- 01-23-00
- 98-54-00
- 65-78-00
- 45-25-00
- 34-61-00
- 85-61-00
- 45-61-00
- 32-98-00
- 23-89-00

Using TDF, the medical records would be filed in the following order:

- (1) 00-11-00
- (2) 01-23-00
- (3) 45-25-00
- (4) 98-54-00
- (5) 34-61-00
- (6) 45-64-00
- (7) 85-68-00
- (8) 65-78-00
- (9) 23-89-00
- (10) 32-98-00

Using the same shelving unit **00** (primary number) as shown previously, the charts would fit approximately in the location on the shelf below, using the number assigned to them.

<b>Shelving Unit 00</b>			
<b>00-09</b>			
<b>10-19</b>	(1)		
<b>20-29</b>	(2)(3)		
<b>30-39</b>			
<b>40-49</b>			
<b>50-59</b>	(4)		
<b>60-69</b>	(5)	(6)	(7)
<b>70-79</b>			(8)
<b>80-89</b>			(9)
<b>90-99</b>			(10)

The following two tables illustrate a group of **units 00-09** and a group of **units 10-19**. These examples represent 20 percent of the shelving space in an organization with terminal digit filing.

**Primary Units 00-09**

	<b>Unit 00</b>	<b>Unit 01</b>	<b>Unit 02</b>	<b>Unit 03</b>	<b>Unit 04</b>	<b>Unit 05</b>	<b>Unit 06</b>	<b>Unit 07</b>	<b>Unit 08</b>	<b>Unit 09</b>
Secondary Numbers	00-09	00-09	00-09	00-09	00-09	00-09	00-09	00-09	00-09	00-09
	10-19	10-19	10-19	10-19	10-19	10-19	10-19	10-19	10-19	10-19
	20-29	20-29	20-29	20-29	20-29	20-29	20-29	20-29	20-29	20-29
	30-39	30-39	30-39	30-39	30-39	30-39	30-39	30-39	30-39	30-39
	40-49	40-49	40-49	40-49	40-49	40-49	40-49	40-49	40-49	40-49
	50-59	50-59	50-59	50-59	50-59	50-59	50-59	50-59	50-59	50-59
	60-69	60-69	60-69	60-69	60-69	60-69	60-69	60-69	60-69	60-69
	70-79	70-79	70-79	70-79	70-79	70-79	70-79	70-79	70-79	70-79
	80-89	80-89	80-89	80-89	80-89	80-89	80-89	80-89	80-89	80-89
	90-99	90-99	90-99	90-99	90-99	90-99	90-99	90-99	90-99	90-99



## Primary Units 10-19

	Unit 10	Unit 11	Unit 12	Unit 13	Unit 14	Unit 15	Unit 16	Unit 17	Unit 18	Unit 19
Secondary Numbers	00-09	00-09	00-09	00-09	00-09	00-09	00-09	00-09	00-09	00-09
	10-19	10-19	10-19	10-19	10-19	10-19	10-19	10-19	10-19	10-19
	20-29	20-29	20-29	20-29	20-29	20-29	20-29	20-29	20-29	20-29
	30-39	30-39	30-39	30-39	30-39	30-39	30-39	30-39	30-39	30-39
	40-49	40-49	40-49	40-49	40-49	40-49	40-49	40-49	40-49	40-49
	50-59	50-59	50-59	50-59	50-59	50-59	50-59	50-59	50-59	50-59
	60-69	60-69	60-69	60-69	60-69	60-69	60-69	60-69	60-69	60-69
	70-79	70-79	70-79	70-79	70-79	70-79	70-79	70-79	70-79	70-79
	80-89	80-89	80-89	80-89	80-89	80-89	80-89	80-89	80-89	80-89
	90-99	90-99	90-99	90-99	90-99	90-99	90-99	90-99	90-99	90-99

## Best Practices

Loose-sheet filing is often thought of as a back-end process. Ancillary departments will frequently send large amounts of loose sheets to the HIM department, which is often called “dumping.” The HIM department then struggles to file the documents in a timely manner in order to ensure appropriate patient care. Without fail, the one document that has not been filed in a timely manner is the one document that is needed right away for patient care.

In order to begin tackling this complex problem the HIM manager should begin working with ancillary departments to control the volume and timely filing of loose sheets. HIM manager should take the time to “sort” approximately one week’s worth of loose filing by department or nursing unit. They should then meet with the directors or managers of those departments and bring “samples.” It may be beneficial to include the hours and salaries that HIM staff is expending on this volume of paper work. Often, loose work can be reduced by departments taking more ownership in the record. Most department managers are not aware of the volume they send each day to the HIM department, nor the staff hours associated with it. HIM managers should continue to work with ancillary department leadership on an ongoing basis to ensure large volumes of loose sheets are not sent at one time and encourage a daily process of forwarding loose sheets to control incoming volumes.

Once the loose sheets or records are received by the HIM department, firm departmental control is needed. It is very difficult to assign one staff member to the sorting or filing process. One concern is the amount of staff an HIM manager may be working with, and another is identifying one staff member who wants to do nothing but sorting or filing for the entire shift.

One way to address incoming volumes is to assign the sorting function to a number of staff members and break it down into daily increments. If there is three clerical staff within the department a simple rotation for the sorting function may work well. Each clerical staff would sort on a certain day. For example, employee A sorts on Monday, employee B sorts on Wednesday, and employee C sorts on Friday. The sorting function can be accomplished by utilizing an expandable accordion file with the numbers 00–99 listed. The employee would then sort by the last two terminal digits.

To further streamline the process, managers can assign specific terminal digit numbers to each employee, equally dividing the 100 sections. For example, if there are 10 employees in the HIM department, each employee would receive 10 sections of filing. The employee can then schedule loose-sheet filing on a daily basis for one to two hours. The employee can have the freedom to choose when to file and how often. The end goal is to decrease loose-sheet filing backlogs. The HIM manager can determine an acceptable backlog level (e.g., one inch per employee) and review the backlogs on a weekly basis.

Depending on the size and structure of the department the number of employees will vary. HIM managers may want to exclude certain employees (e.g., coders or transcriptionists) and divide the loose-sheet filing among all remaining clerical staff. In smaller departments managers may want to include coders and transcriptionist.

## **Productivity Standards**

Productivity can be measured in many ways using many methods. The key is identifying and defining the productivity standards that work best for each respective department. One approach is the benchmarking approach, in which the HIM manager contacts other facilities and collects and evaluates data on the standards they have set for their department. By gathering information from multiple sites and evaluating the data collected, the HIM manager can define the standards that work best for the department as well as pick up some new process ideas and contacts.

Another approach that can be used is to conduct a self-analysis to help set productivity standards. HIM managers can identify their own trends by conducting various studies such as average volume of loose sheets (inches) that come into the department per day, number of records checked-in to the department per day, and so on. The study can run for an amount of time deemed appropriate to provide as accurate a result as possible (i.e., 30, 60 days). Once the numbers are determined, an HIM manager can further analyze the data and calculate productivity standards based on number of staff, time (hours), and skill set needed to complete each task. For example, if the HIM manager concludes that approximately 12 inches of loose sheets come in per day and there is six clerical staff that file for four hours per day, the HIM manager would designate that each clerical staff must file two inches of loose sheets per day ( $12 \text{ inches} / 6 \text{ staff} = 2 \text{ inches}$ ). This should help to prevent a backlog of filing loose sheets to build up.

As stated, there are many methods that can be used to help define the standards that work best for each department and it is up to the HIM manager to make that decision. Setting productivity standards aside, one major priority in ensuring optimal productivity is in the training of staff. In order for them to perform well they must be trained well. Below are instructions for one exercise that can be used in training and educating staff to help optimize outcomes.

## **Exercise**

In Appendix A there is a set of health record numbers out of order. Print the document on three sheets of labels and place the labels on index cards. Shuffle the index cards and use them with new employees as part of their training to learn how to put charts in terminal digit order. The answer key is listed in appendix B and employee check off form in appendix C.

## Sample Terminal Digit Filing Policy

**Purpose:** In order to promote patient safety and quality patient care health records must be retrieved in a timely manner. In order to promote a single filing system that expands the file system equally and aids in decreasing misfiles the health information management department utilizes terminal digit filing.

**Policy:** The system of filing records is terminal digit filing.

### Definitions:

Terminal digit order: A system of filing using a six-digit number (or higher) that is divided into three parts, whereby the last two digits are considered primary.

Primary digits: The last two digits to the right in the number.

Secondary digits: The middle two digits in the number.

Tertiary digits: Any remaining digits.

### Examples:

1.	90011-22-33	90011	22	33
		Tertiary Digit	Secondary Digit	Primary Digit
2.	204-56-33	204	56	33
		Tertiary Digit	Secondary Digit	Primary Digit
3.	24-00-33	24	00	33
		Tertiary Digit	Secondary Digit	Primary Digit

### Procedure:

In the terminal digit filing system at (Insert Organizational Name) there are 100 primary sections, ranging from (Insert Organization Numbers). To locate or file a medical record, use the following procedure:

1. Locate the primary digit first and proceed to the corresponding section. Using example #1 above, the clerk would proceed to section "33" first.
2. After locating the primary section, identify the secondary digits and proceed to the corresponding shelf within the primary section. Using example #1 above, proceed to the shelf with the digits "22."
3. After locating the correct secondary digit, identify the tertiary digits. These digits are filed in numerical order.

## Appendix A: Health Record Numbers

83-92-85	29-04-92	25-84-48
35-45-80	06-61-94	93-13-72
07-02-29	65-36-57	90-33-73
88-86-46	19-84-05	26-91-29
32-25-36	16-23-16	64-29-76
93-54-17	79-25-14	48-68-01
13-83-62	18-36-78	57-88-88
12-76-81	21-57-22	48-27-56
68-16-56	08-49-55	34-38-98
09-82-28	83-52-40	35-86-25

78-84-69	28-38-56	31-18-54
94-86-89	09-56-37	48-93-92
58-95-69	54-68-44	82-05-13
19-43-60	34-79-44	81-79-22
92-73-27	59-36-14	84-18-76
66-83-83	42-93-49	24-11-30
14-49-98	78-58-78	74-31-53
60-42-96	70-70-64	01-68-22
14-09-53	75-64-25	84-52-40
36-93-06	30-52-18	14-83-62
76-45-15	09-15-92	92-33-73

## Appendix B: Answer Key

48-68-01	09-56-37	58-95-69
19-84-05	83-52-40	93-13-72
36-93-06	84-52-40	90-33-73
82-05-13	54-68-44	92-33-73
79-25-14	34-79-44	84-18-76
59-36-14	88-86-46	64-29-76
76-45-15	25-84-48	18-36-78
16-23-16	42-93-49	78-58-78
93-54-17	14-09-53	35-45-80
30-52-18	74-31-53	12-76-81
21-57-22	31-18-54	66-83-83
01-68-22	08-49-55	83-92-85
81-79-22	68-16-56	57-88-88
75-64-25	48-27-56	94-86-89
35-86-25	28-38-56	29-04-92
92-73-27	65-36-57	09-15-92
09-82-28	19-43-60	48-93-92
07-02-29	13-83-62	06-61-94
26-91-29	14-83-62	60-42-96
24-11-30	70-70-64	34-38-98
32-25-36	78-84-69	14-49-98

## Appendix C: Employee Check Off

Date: \_\_\_\_\_

Employee Name: \_\_\_\_\_

Terminal Digit Filing Exercise Percentage Correct: \_\_\_\_\_

Follow Up Action: \_\_\_\_\_

Signature: \_\_\_\_\_

## Completed Sample: Employee Check Off

Date: January 1, 2009

Employee Name: Jane Smith

Terminal Digit Filing Exercise Percentage Correct: 99%

Follow Up Action: No further action required

Signature: Nancy Doe, RHIA



## Resources

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