2010 EDI Administrative Transaction Review

Electronic data interchange (EDI) is the exchange of standardized electronic documents between organizations from one computer application to another.[1] The electronic exchange of health information reduces administrative costs, lessens claim errors, and improves productivity.[2] Many factors influence the rate of EDI activity including financial resources and technical infrastructure.[3] The Health Insurance Portability and Accountability Act of 1996 (HIPAA) Administrative Simplification provisions allow for the electronic exchange of standard transactions between payers and providers.[4] COMAR 10.25.09, *Requirements for Payers to Designate Electronic Health Networks*, requires payers operating in Maryland with an annual premium volume exceeding $1 million to report census information to the Maryland Health Care Commission (MHCC). Each year the MHCC examines the administrative transaction data from payers and develops an industry brief. Payers and providers use this information to monitor and enhance their use of administrative technology.

A total of 43 payers submitted practitioner and hospital information this year, an increase of 23 percent from 2008.[5] While there is only one payer new to the Maryland market in 2009, the remaining increase is due to a number of other payers exceeding the $1 million threshold. The payers include the six large private payers (Aetna, CareFirst, CIGNA, Kaiser, MAMSI, and United Healthcare), additional other private payers, government payers (Medicare and Medicaid), and the seven Medicaid Health Choice Managed Care Organizations (MCOs). EDI increased approximately 1.4 percent in 2009 *(Table 1)*. While this increase is about 0.8 percent less than the increase in 2008, it is consistent with estimates that EDI activity will increase at a slow incremental pace as payers continue to support electronic transactions. A slower increase in EDI activity is likely a result of payers requiring paper transactions, and also providers continuing to use paper transactions. Typically, the largest share of EDI activity is among large private payers. While this holds true for the 2009 reporting period, the share of EDI activity shifted. The share of EDI activity decreased approximately 5 percent among large private payers, while Medicaid increased roughly 3 percent and the MCOs increased about 2 percent *(Figure 5 & 6)*. This shift demonstrates an increase in dependence on public assistance and is most likely attributed to the state of the economy.

Maryland EDI Activity Overview (%)

Table 1

Provider Type	Government		Change	Private Payers		Change	All Payers		Change
	08	09	+/-	08	09	+/-	08	09	+/-
Practitioner	89.8	91.1	1.3	80.4	82.4	2.0	84.7	86.9	2.2
Hospital	90.9	91.3	0.4	84.1	85.4	1.3	87.5	88.5	1.0
Subtotal	**89.9**	**91.1**	**1.2**	**80.7**	**82.7**	**2.0**	**85.0**	**87.1**	**2.1**
Dental	51.4	14.7	-36.7	38.7	40.5	1.8	40.7	33.8	-6.9
Total	**89.1**	**88.6**	**-0.5**	**76.7**	**78.8**	**2.1**	**82.3**	**83.7**	**1.4**

Figure 1

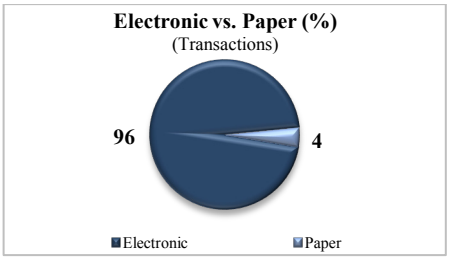


Figure 2

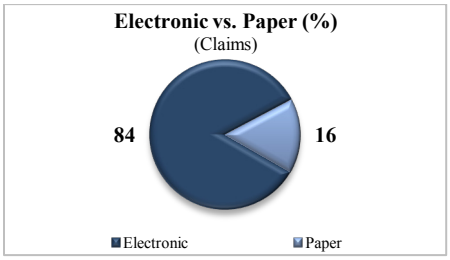


Figure 3

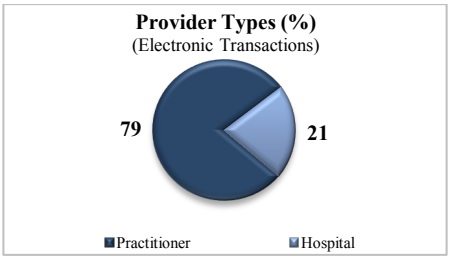


Figure 4

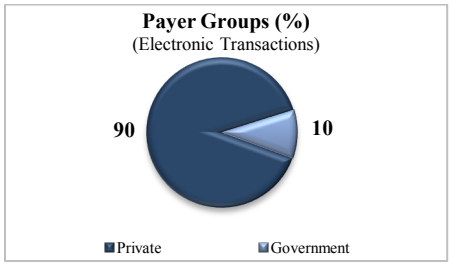


Figure 5

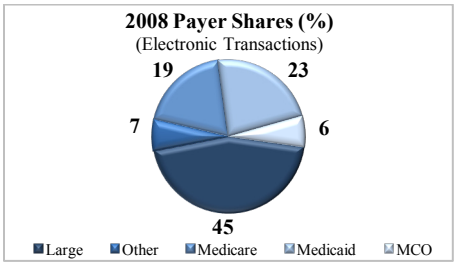
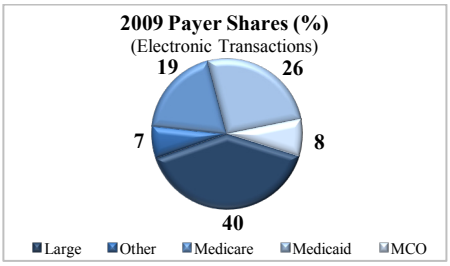


Figure 6



[1] U.S. Census Bureau, *Annual and Quarterly Services*, August 6, 2010. Available at: http://www.census.gov/services/definitions.html.

[2] M. Friedrich, *Health Care Practitioners and Organizations Prepare for Approaching HIPAA Deadlines*, October, 2001. Available at: http://jama.ama-assn.org.

[3] A. Bakar, M. Anuar, and K. Gengeswari, *Factors Influencing the Implementation of Electronic Data Interchange (EDI)*, June, 2008. Available at: http://www.fppsm.utm.my/download/doc_view/37-factors-influencing-the-implementation-of-electronic-data-interchange-edi.html.

[4] 45 CFR Parts 160, 162, and 164.

[5] A list of 2010 EDI reporting payers can be found on the MHCC website at: http://mhcc.maryland.gov/edi/information.html

Practitioner and Hospital EDI

During this reporting period, EDI activity among private and government payers increased slightly for practitioners and remained relatively the same for hospitals *(Figure 7 & 8)*. Government payers continued to report higher EDI rates than private payers. Private payers commonly require supporting documentation to be submitted with the claims; thus, practitioners are more likely to submit the claim on paper. While EDI remained unchanged for government payers, large private payers experienced about a 3 percent increase of EDI activity as other private payers reported a decrease of around 1 percent over the past year *(Figures 9 & 12)*.

Private and Government Payer EDI

Figure 7

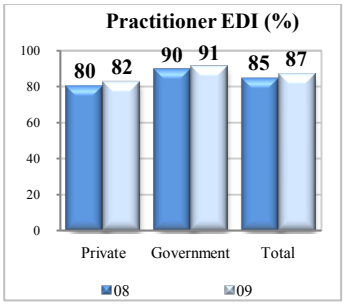


Figure 8

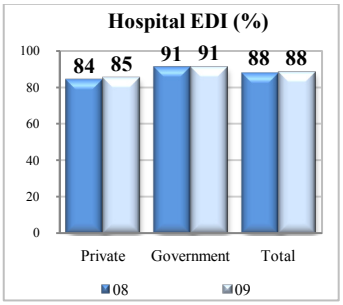
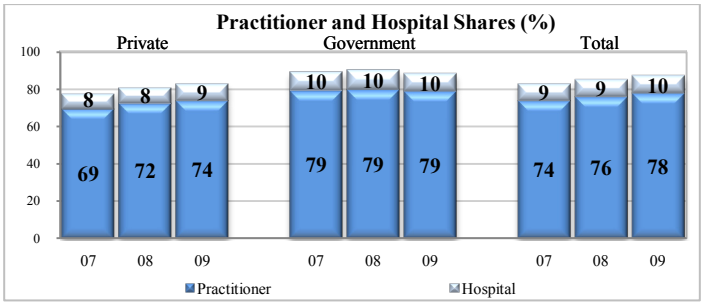


Figure 9



Private Payer EDI

Figure 10

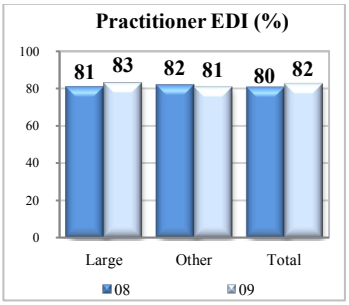


Figure 11

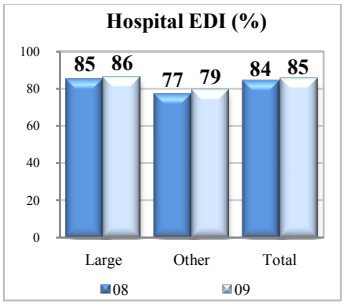
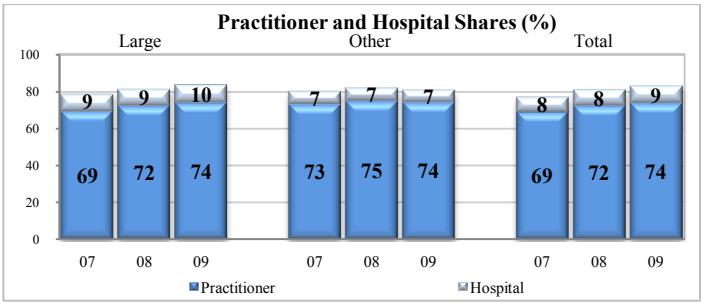


Figure 12



Large Private Payer EDI

Five of the six large private payers reported an increase in practitioner EDI activity *(Figure 13)*, and four of the six large private payers reported an increase in hospital EDI activity *(Figure 14)*. Aetna reported the largest increase of EDI activity among the six large private payers for practitioners and hospitals at approximately 9 percent and 10 percent, respectively, which is due to their continued efforts to promote EDI activity. Kaiser is the only large payer that maintains a staff-model health maintenance organization where most claims require paper submissions. United Healthcare acquired MAMSI in 2003, and continues to transition MAMSI enrollees to their business.

Figure 13

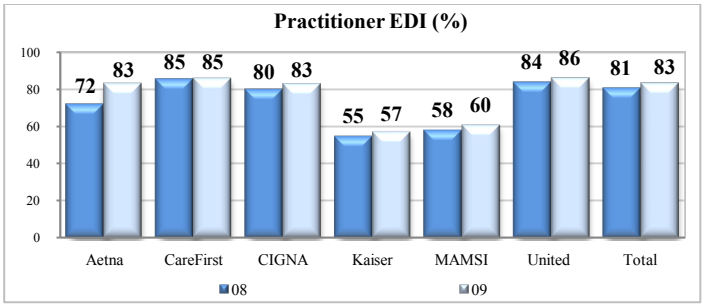


Figure 14

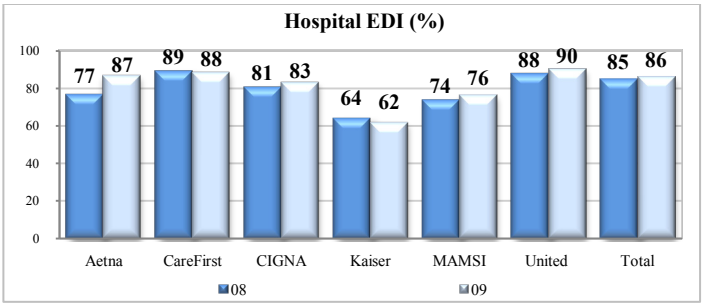
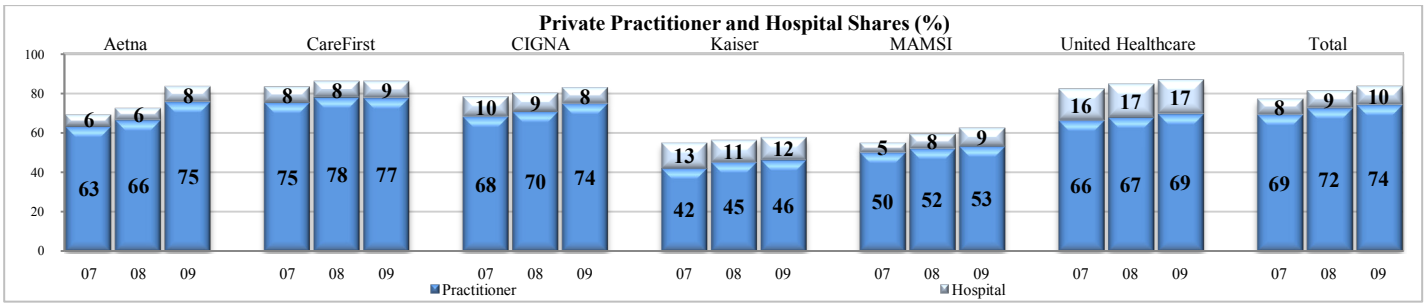


Figure 15



Auto Adjudication

Auto adjudicated claims are received and processed automatically, which reduces the amount of time for the claim to be processed and paid. Auto adjudication rates are influenced by the payers' business model and policies. In 2009, auto adjudication rates for practitioners and hospitals increased for five of the six large private payers *(Figure 16 & 17)*. Aetna reported the greatest increase in practitioner auto adjudication rates at approximately 17 percent. MAMSI reported the greatest increase of auto adjudication rates for hospitals at roughly 12 percent. Kaiser reported the lowest auto adjudication rates for practitioners.

Figure 16

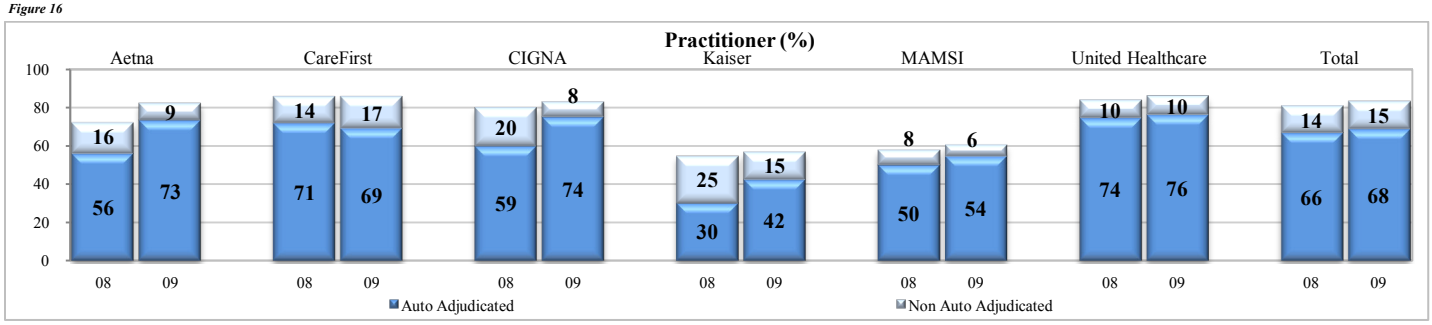
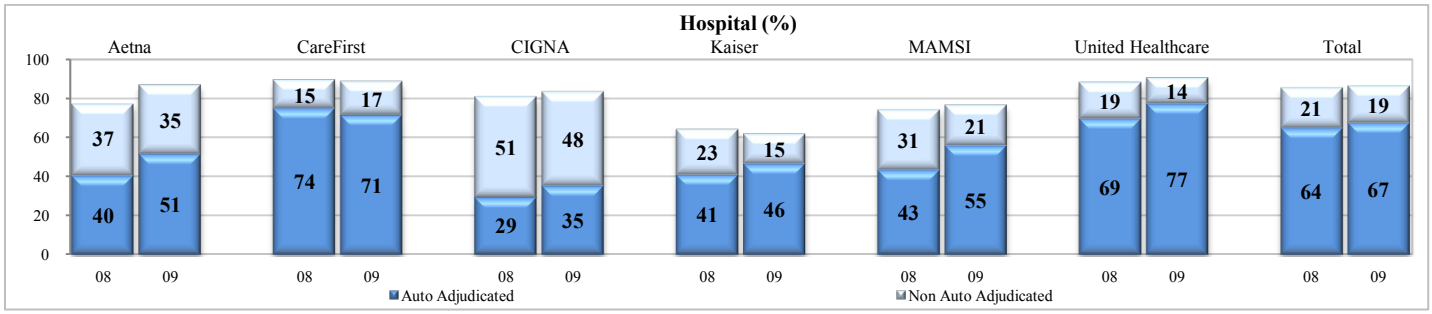


Figure 17



Government and MCO Payers

In 2009, Medicare EDI activity was reported at about 98 percent and Medicaid EDI activity was reported at nearly 93 percent *(Figure 18)*. Over the past year, government payer practitioner and hospital shares of EDI remained relatively unchanged *(Figure 18)*. The MCOs continue to trail Medicare and Medicaid in EDI activity. Practitioner shares of EDI continue to increase for six of the seven MCOs *(Figure 19)*. Jai Medical Systems continues to report little use of EDI.

Figure 18

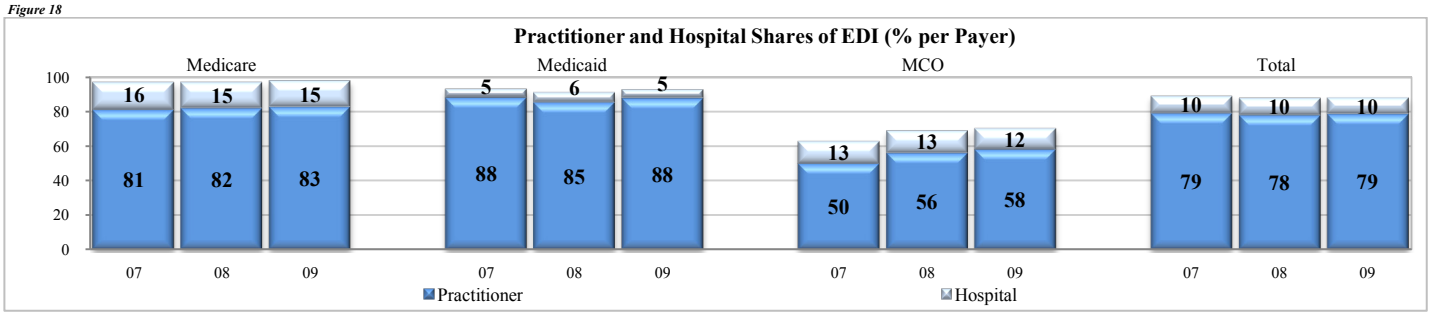
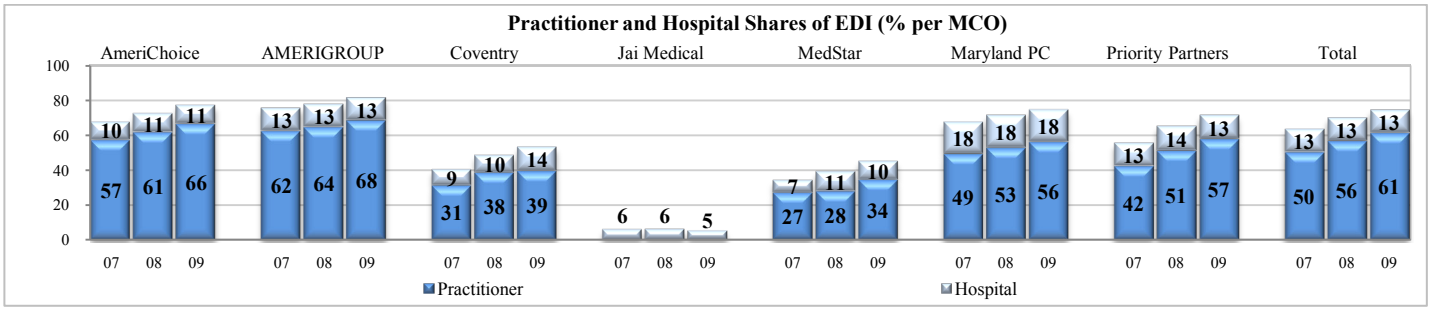


Figure 19



Other Administrative Transactions

Other electronic administrative transactions can contribute to administrative efficiencies. During this reporting period five additional payers reported other administrative transactions. The additional payers did not support all non-claims transactions, resulting in a decrease among selected administrative transactions *(Table 2)*. Web-based transactions are entered by providers into a web-based portal, while batch-based transactions allow for a single file with information for multiple users to be sent over the Internet to the payers at one time. Aetna is the only large private payer that reported not supporting batch-based transactions *(Table 3)*. United Healthcare supports batch transactions for all of the other administrative transaction types.

Table 2

Payers Supporting Other Administrative Transactions (%)

Other Administrative Transaction Types	2007 *(N=24)*	2008 *(N=24)*	2009 *(N=29)*
Health Plan Eligibility (270/271)	70	78	83
Health Claim Status (276/277)	74	74	79
Referral Certification & Authorization (278)	35	35	24[1]
Health Plan Premium Payments (820)	4	13	10
Enrollment/Disenrollment in a Health Plan (834)	35	48	41
Claim Payment & Remittance Advice (835)	83	91	86

[1] *Coventry Health Care of Delaware has previously reported 278 claims and did not report these claims in 2009.*

Table 3

Large Private Payers Supporting Web-Based (W) vs. Batch (B) Transactions (%)

Payer	270/271		276/277		278		820		834		835	
	W	B	W	B	W	B	W	B	W	B	W	B
Aetna	✓		✓		✓						✓	
CareFirst	✓		✓		✓				✓			✓
CIGNA	✓		✓		✓			✓		✓	✓	✓
Kaiser		✓		✓								✓
MAMSI	✓	✓	✓	✓	✓	✓				✓		✓
United Healthcare	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓

Dental EDI

Forty-nine payers reported dental EDI activity in 2009, which includes 42 private payers, Medicaid, and the seven MCOs. Dental EDI continues to trail practitioner and hospital EDI. In 2009, dental EDI decreased nearly 7 percent overall and continues to trail national EDI *(Table 4)*. The overall decrease is mainly due to a decrease of Medicaid dental EDI activity *(Figure 22)*. Pediatric dental business transitioned from the MCOs to Medicaid, thus the share of dental claims shifted between the MCOs and Medicaid *(Figure 20 & 21)*. Medicaid assumed the responsibility for its pediatric dental business from the MCOs. This resulted in an increase in paper claims *(Figure 22)*.

Figure 20

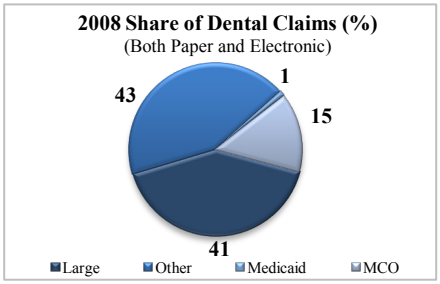


Figure 21

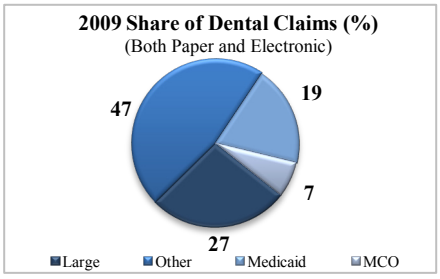


Figure 22

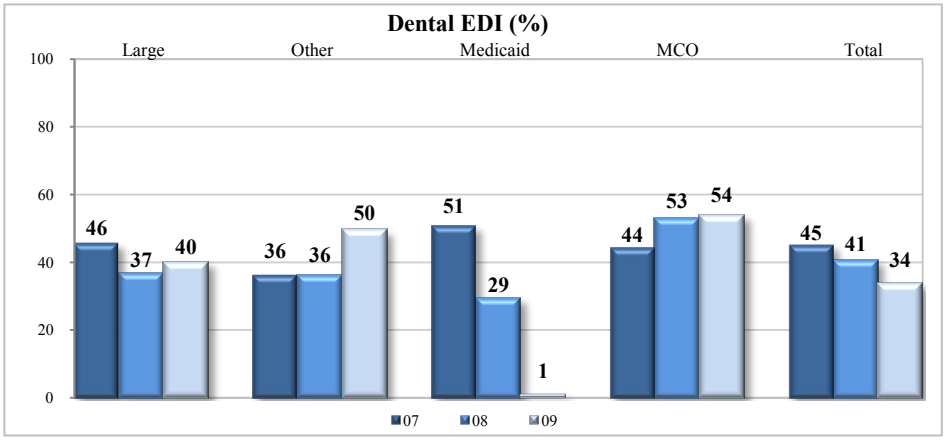


Table 4

Percentage EDI for Maryland and National Dental Payers

Payers	2006	2007	2008	2009
Maryland	42	45	41	34
National	48	52	54	57